During the clinical examination of orthodontic patient the dentist should examine:

{=Anamnesis, extraoral and intraoral examination

- ~ Profile, symmetry and proportions of the face
- ~ Extraoral and intraoral examination
- ~ Examine the teeth, dental arches and bite
- ~ Examine the dental arches and bite}

The examination of orthodontic patient consist of the next parts:

{=Extraoral and intraoral

- ~ Examination of face, profile and head
- ~ Examination of teeth, dental arches and occlusion
- ~ Examination of lips, chin, dental arches, teeth and occlusion
- ~ Examination of face and occlusion}

The clinical examination can include next methods:

- {=Extraoral and intraoral clinical examination
- ~ Roentgenologic, photometric methods
- ~ Intraoral examination and models analysis
- ~ Extraoral examination and models analysis
- ~ Measuring of diagnostic models and examination of dental arches}

During the profile examination the dentist should examine:

{=Shape and size of the nose, nasolabial angle, position of lips, chin position, type of profile

- ~ Type and shape of profile
- ~ Shape of the nose, symmetry of the face, position of chin
- ~ Smile, type of profile, proportion of the face
- ~ Type of profile}

The extraoral examination consist of:

{=Shape and size of the head, symmetry and proportions of the face, profile examination, chin and lip position, mandibular angle, smile, TMJ examination

- ~ Symmetry of the face, profile examination, TMJ examination
- ~ Profile examination, symmetry of the face, smile, examination of occlusion
- ~ No correct answer
- ~ Symmetry and proportions of the face, profile examination}

The dentist should examine the TMJ during:

{=Extraoral examination

- ~ Intraoral examination
  - ~ Additional methods of examination
- ~ Roentgenologic methods of examination
  - ~ No correct answer}

The clinical examination of orthodontic patient the dentist should make:

{=In each clinical case

- ~ In case when patient has malocclusion
- ~ After roentgenologic examination (orthopantomography)
- ~ All the answers
- ~ After TMJ examination}

What types of diagnosis do you know?

{=Previous, final diagnosis

- ~ General diagnosis
- ~ Clinical diagnosis, roentgenologic diagnosis
- ~ Final diagnosis
- ~ All the answers}

Additional methods of diagnostic are:

{=Roentgenologic, anthropometric, photometric, functional methods

- ~ Palpation, percussion
- ~ Cephalometric analysis
- ~ Roentgenologic and profile analysis
  - ~ Functional methods}

In case history the dentist should write:

{=The data of clinical examination and results of additional methods

- ~The results of clinical examination and profile measuring
- ~ Describe the teeth position, dental arches and type of occlusion
- ~No correct answer
- ~The data of clinical examination}

The intraoral examination consist of:

{=Examination of soft tissues, teeth, dental arches and occlusion

- ~ Examination of teeth, dental arches and occlusion
- ~ Examination of frenulums, teeth and occlusion
- ~ Examination of teeth position, shape of dental arches and
- ~ Profile and occlusion examination}

During the face examination the dentist can establish:

{=Shape, symmetry and proportions of the face, the depth of supramental sulcus

- ~ The type and position of lower jaw, chin and nasolabial angle
- ~ Shape of the nose, position of lips, frenulum of upper and lower lip
- ~ Shape of the head
- ~ The type of profile}

After clinical examination of orthodontic patient the dentist can make:

### {=Previous diagnosis

- ~ General diagnosis
- ~ Clinical diagnosis
- ~ Final diagnosis
- ~Make the diagnosis only after measuring the models}

#### The teeth examination include:

{=Number, position, size, shape, hard tissues state

- ~ Position, eruption and size of the teeth
- ~ Time and place of eruption
- ~ Teeth malposition
- ~ Number, size, shape, hard tissues state}

#### The soft tissue examination include:

{=Examination of frenulums, gums, tongue

- ~ Examination of gums and teeth
- ~ Examination of nose, cheeks, chin
- ~ Photometric examination of profile
- ~ Examination of gums and tongue}

What types of human age are distinguished?

- {=Passport, biological, dental, bone
- ~Dental
- ~Passport
- ~Biological
- ~Dental and passport}

### Oral cavity examination begins with:

- {=Oral mucosa
- ~Individual teeth
- ~Dental arches

- ~Occlusion
- ~No correct answer}

In what planes is occlusion described at physical examination? {=Sagittal, vertical and transversal

- ~Vertical and horizontal
  - ~Sagittal and vertical
  - ~Sagittal
  - ~Transversal}

Subjective methods of examination consist of:

- {= Passport part and anamnesis obtaining
- ~Passport part
- ~ Anamnesis obtaining
- ~ Roentgenologic methods
- ~Methods of studying the speech function}

What is anamnesis?

{=Patient`s complaints, reasons for the beginning of the disease, peculiarities of its development, living conditions of the patient

- ~Instrumental investigation of the patient by a doctor
- ~Filling in the medical history
- ~Additional methods of investigation
- ~ Roentgenogram of teeth}

How do we measure the head width?

- {=Between laterally prominent points (eu) on the lateral surface of head on the right and on the left
- ~ Between the most protruding points (zy) of the temporal arch on the right and on the left
- ~ Between the inferior and downwards located points (go) of the lower jaw angles on the right and on the left
- ~ No correct answer
- ~ Between the most protruding point on the lower part of forehead along the medial-sagittal plane and the most backwards protruding point (pl-op) of the occiput on the medial-sagittal plane}

A 20—year-old girl appealed to the orthodontist with complains of an esthetic defect. During photometric investigation it was revealed that after Izard`s index she has narrow face. What should be the index value in this case?

```
{=From 104 and more
```

- ~ From 97 to 103
- ~ From 80 to 108
- ~ From 96 and less
- ~ From 96 and more}

Face profile is detected by means of estimating the position of?

- {=The upper lip and lower lip relative to the esthetic plane
- ~The upper lip and the top of the nose to the esthetic plane
- ~The lower lip and the top of the nose to the esthetic plane
- ~The lower lip and the top of the chin to the esthetic plane
- ~The upper lip and the top of the chin to the esthetic plane}

Izard's morphological facial index for a wide face makes?

```
{=From 96 and less
```

- ~From 104 and more
- ~From 97 to 103
- ~From 80 to 108
- ~From 96 and more}

When characterizing the face profile the position of the lips relative to the esthetic plane by Ricketts is taken into account. This plane goes through the points?

```
{=oph-gn
~sn-gn
~EN-DT
~UL-LL
~No correct answer}
```

Tonn's index is used to detect?

- {=The proportionality of the upper and lower incisors
- ~The proportionality of the upper and lower arched dimensions
- ~Dental arches width
- ~Dental arches length
- ~The transversal dimensions of the dental arches}

Pont's methods is used for detecting:

- {=The transversal dimensions of the dental arches
- ~The sagittal dimensions of the dental arches
- ~Correlation of the totals of the primary upper and lower incisors
- ~Correlation of the totals of the permanent upper and lower incisors
- ~The proportionality of the upper and lower incisors}

Dimensions correlation of the permanent upper and lower incisors defined by Tonn's index equals:

```
{=1.33
```

~1.86

~1.05

~1.3

~2.0}

Dimensions correlation of the primary upper and lower incisors defined by Dolgopolova's index equals:

```
{=1.3
```

~1.86

~1.05

~1.33

~2.0}

Korkhaus`method is used for detecting:

- {= The sagittal dimensions of the dental arches
- ~The transversal dimensions of the dental arches
- ~Correlation of the totals of the primary upper and lower incisors
- ~Correlation of the totals of the permanent upper and lower incisors
- ~The proportionality of the upper and lower incisors}

How do we measure themorphological width of head?

- {=Between the most protruding points (zy) of the temporal arch on the right and on the left
- ~Between laterally prominent points (eu) on the lateral surface of head on the right and on the left
- ~Between the inferior and downwards located points (go) of the lower jaw angles on the right and on the left
- ~No correct answer

~Between the most protruding point on the lower part of forehead along the medial-sagittal plane and the most backwards protruding point (pl-op) of the occiput on the medial-sagittal plane}

Pont's index depends on the total of the mesiodistal dimensions of the:

```
{=Central and lateral incisors
   ~Central incisors
   ~Lateral incisors
   ~Central, lateral incisors and canines
   ~All groups of teeth}
Pont's molar index makes:
{=64
~80
~85
~57
~65}
Pont's premolar index makes:
\{=80
~64
~85
~57
~65}
By the photograph of a patient we characterize:
{= Front and profile of head
~ Lips shape
~ Eyes shape
~Superciliary arches position
~ Temporal arches evidence}
Head length is measured between the points:
{= gl-op
~ eu-eu
~zy-zy
~ go-go
\sim t-v
```

Izard's morphological facial index for average face makes?

{=From 97 to 103

- ~From 96 and less
- ~From 104 and more
- ~From 80 to 108
- ~From 96 and more}

Describe the measuring points on the upper premolars for Pont's method:

{=In the middle of the intertubercular fissure of premolars

- ~ On the distal surfaces of premolars
- ~ On the mesial surfaces of premolars
- ~ On the vestibular surfaces of premolars
- ~No correct answer}

Describe the measuring points on the lower premolars for Pont's method:

{=Distal contact points on the clivus of the buccal tubercles of premolars

- ~ In the middle of the intertubercular fissure of premolars
- ~ On the mesial surfaces of premolars
- ~On the buccal surfaces of premolars
- ~No correct answer}

Describe the measuring points on the lower molars for Pont's method:

{= Posterior buccal tubercles

- ~On the distal surfaces of molars
- ~On the mesial surfaces of molars
- ~ On the lingual surfaces of molars
- ~No correct answer}

Anthropometric methods of examination are:

{=Measuring of diagnostic models

- ~ Estimation of X-ray
- ~ Cephalometric analysis
- ~ Photometry
- ~ No correct answer}

### Gerlah's method allow to measure:

- {=Proportionality of dental arches of upper and lower jaws
- ~ Symmetry of dental arches of upper and lower jaws
- ~ Depth of palate
- ~ Width of upper incisors
- ~ The sagittal dimensions of the dental arches}

#### Gerlah's method is based on:

- {=Correlation of anterior and lateral segments
- ~ The sum of 4 lower incisors width
- ~ The distance between upper premolars
- ~ The distance between central incisors and last molars
- ~ The distance between upper molars}

### Snagina's method allow to measure:

- {=Width and length of apical basis of upper and lower jaws
- ~ Width of upper and lower jaws
- ~ Proportionality of dental arches of upper and lower jaws
- ~ Symmetry of dental arches of upper and lower jaws
- ~ Depth of palate}

For measuring in transversal plane by Snagina's method we use the points:

- {=On upper jaw deepest points between the apices of 3<sup>rd</sup> and 4<sup>th</sup> teeth, on lower jaw points between the 3<sup>rd</sup> and 4<sup>th</sup> teeth, 8mm below the gingival line ~On upper jaw middle points on 1<sup>st</sup> premolars` occlusal surface, on lower jaw distal points on 1<sup>st</sup> premolars` occlusal surface
- ~On upper jaw deepest points between the apices of 4th and  $5^{th}$  teeth, on lower jaw points between the  $4^{th}$  and  $5^{th}$  teeth, 8mm below the gingival line
- ~On upper jaw points on canines, on lower jaw distal points on 1<sup>st</sup> premolars` occlusal surface
- ~On upper jaw deepest points between the apices of  $2^{nd}$  and  $3^{rd}$  teeth, on lower jaw points between the  $2^{nd}$  and  $3^{rd}$  teeth, 8mm below the gingival line}

The length of apical basis of upper and lower jaws by Snagina's method depends on:

- {=The sum of mesiodistal width of 12 permanent teeth
- ~ The sum of mesiodistal width of 10 permanent teeth

- ~The sum of mesiodistal width of 6 permanent teeth
- ~The sum of mesiodistal width of 8 permanent teeth
- ~The sum of mesiodistal width of 4 permanent teeth}

The dental arch form is measured by:

- {=Hawley-Herber-Herbst`s method
- ~Korkhaus`s method
- ~Gerlach`s method
- ~Pont`s method
- ~Tonn`s method}

The graphical method of Hawley-Herber-Herbst's is used to find out:

- {=Form of dental arch
- ~Size of dental arch in transversal plane
- ~Size of dental arch in vertical plane
- ~Symmetry of dental arches
- ~Proportionality of dental arches}

In which cases should dentist use Snagina's method for diagnostic?

- {=If patient has crowding and narrow dental arches
- ~If patient has malocclusion in vertical plane
- ~If patient has deep bite
- ~In all cases
- ~No correct answer}

Anthropometric methods of examination dentist should use for:

- {=Making the final diagnosis
- ~Making the previous diagnosis
- ~Making the better examination
- ~Making the photometry
- ~No correct answer}

The segments in Gerlah's method are:

{=Anterior (4 incisors), 2 lateral (canines, premolars, 1<sup>st</sup> molars)

~Central (4 incisors, canines), 2 medium (premolars), 2 distal (1<sup>st</sup>, 2<sup>nd</sup> molars)

- ~Anterior (4 incisors, canines), 2 lateral (premolars, 1<sup>st</sup> molars)
- ~Central (central incisors), lateral (lateral incisors, canines, 1<sup>st</sup> premolars)
- ~Anterior (4 incisors), lateral (canines, premolars, 1<sup>st</sup> molars)}

The apical basis of upper and lower jaws is measured by:

- {=Snagina`s method
- ~Hawley-Herber-Herbst`s method
- ~Korkhaus`s method
- ~Gerlach`s method
- ~Pont`s method}

The dentist start to make Hawley-Herber-Herbst's diagram from:

- {=Measuring the mesiodistal width of 3 upper teeth (central, lateral incisors, canine)
- ~Measuring the mesiodistal width of 6 upper teeth (central, lateral incisors, canine)
- ~Measuring the distance between points on the 4<sup>th</sup> and 5<sup>th</sup> teeth
- ~Measuring the distance between upper first premolars
- ~Measuring the distance between upper first molars}

In which cases should dentist use Gerlach's method for diagnostic?

- {=If patient has dental arches deformation
- ~If patient has abnormal teeth eruption
- ~If patient has malocclusion in vertical plane
- ~If patient has deep bite
- ~If patient has malocclusion II class by Angle}

In which cases should dentist Hawley-Herber-Herbst's method for diagnostic?

- {=If patient has dental arches deformation
- ~If patient has abnormal teeth eruption
- ~If patient has malocclusion in vertical plane
- ~If patient has microdontia
- ~No correct answer}

What do we need to have for making anthropometric investigations?

- {=Models
- ~Probe, mirror, tweezers
- ~X-ray

```
~Cephalometry
   ~Photo}
On the CAD arch of Hawley-Herber-Herbst's diagram there are located:
   {=Six frontal teeth
   ~Three frontal teeth
   ~Incisors
   ~Eight teeth
   ~The whole dental arch}
The orthocross is used for:
   {=Express-diagnostics
   ~Detecting jaws asymmetry
   ~Measuring the length of dental arch
   ~ Measuring individual teeth dimensions
   ~Finding out the proportionality of groups of teeth}
What is the form of upper dental arches in the period of milk dentition?
   {=Semicircle
   ~Parabola
   ~Circle
   ~Semiellipse
   ~No correct answer}
What is the form of upper dental arches in the period of permanent dentition?
   {=Semiellipse
   ~Semicircle
   ~Parabola
   ~Circle
~No correct answer}
  The 5<sup>th</sup> phase of mastication is the phase of?
      {=Bolus formation and swallowing
      ~ Rest
      ~ Adaptation
      ~ Mastication
      ~ Putting food into the mouth}
```

```
When conducting the mastication test by Rubinov we use?
      {=0.8 gr of hazelnut
      ~ 5 gr of almond
      ~ 6 gr of dried crust
      ~ 0.5 gr of hazelnut
      ~ 5gr of hazelnut}
   The 1<sup>st</sup> phase of mastication is the phase of?
      {=Rest
      ~Putting food into the mouth
      ~Mastication
      ~Adaptation
      ~Bolus formation and swallowing}
   The 2<sup>nd</sup>
            phase of mastication is the phase of?
      {=Putting food into the mouth
      ~Bolus formation and swallowing
      ~Rest
      ~Mastication
   ~Adaptation}
   To detect the masticatory capacity of teeth Oksman took into account:
      {=All answers are correct
      ~The area of the occlusive surfaces of teeth
      ~Tubercules number
      ~The number of roots and their dimensions
      ~Stage of alveolar atrophy}
   The 4<sup>th</sup> phase of mastication is the phase of?
         {=Mastication
         ~Rest
         ~Putting food into the mouth
```

Mastication dynamometry is:

~Adaptation

{=Method of detecting the force of mastication

~Bolus formation and swallowing}

- ~To detect the violation of the mastication and mimic in quiescence, tension and lower jaw movement
- ~The recording of the masticatory muscles tone in different stages
- ~Registration of the contractions of the mastication muscles
- ~No correct answer}

Normally the tone of the quiescence of the masticatory muscle proper mostly reaches:

```
{=40gr
~180 gr
~200gr
~120 gr
~5 gr}
```

During examination of the 20-year-old girl orthodontist detected her mastication effectiveness by means of studying the degree of hazelnut grinding, consistence and weight of the rest. Who is the author of the test?

```
{=Rubinov

~Christiansen

~Helman

~Oksman

~No correct answer}
```

The table of the upper jaw coefficients by Oksman equals to:

```
{=21233653
~21144644
~11233654
~21333643
~No correct answer}
```

With the help of electromyographic investigation it is possible:

{=To detect the violation of the mastication and mimic in quiescence, tension and lower jaw movement

- ~The recording of the masticatory muscles tone in different stages
- ~Method of detecting the force of mastication
- ~Registration of the contractions of the mastication muscles
- ~No correct answer

With the help of myotonometry it is possible to detect:

- {=Muscular tonus in quiescent and contraction state
- ~Muscular tonus in the state of physiological rest
- ~Muscular tonus during jaw protrusion
- ~Graphic registration of muscles potentials
- ~No correct answer}

What method should be used when mastication function is studying?

- {=Electromyography
- ~Panoramic radiography
- ~Profile teleroentgenography
- ~Arthrography
- ~Anthropometric investigations}

To calculate the coefficients Ahapov took into account?

- {=Functional value of dentition as 50%
- ~The lateral incisors of the upper jaw as a unit of functional strength
- ~The 3<sup>rd</sup> molars
- ~The condition of periodontium
- ~All correct answer}

## Electromyography is:

- {=The recording of muscles biopotential with the purpose of investigating their physiological activity
- ~The recording of the masticatory muscles tone in different stages
- ~Method of detecting the force of mastication
- ~Registration of the contractions of the mastication muscles
- ~No correct answer}

# Masticatiogram reflects:

- {=All mastication movements performed during chewing a nut weighting 0.8gr
- ~All mastication movements performed during chewing an almond weighting 0.8gr
- ~All mastication movements performed during chewing an almond weighting 2 gr
- ~All mastication movements performed during chewing a nut weighting 2gr
- ~No correct answer}

To a mastication function characteristic we refer:

- {=All the answers are correct
- ~Mastication phases presence
- ~Unilateral mastication
- ~The increase of mastication movements number
- ~The increase of the time of food mastication}

Which method of investigation of mastication function is the most informative?

- {=Electromyography
- ~Mastication dynamometry
- ~Myotonometry
- ~Gnathodynamometry
- ~Myoarthrography}

When conducting the mastication test by Helman we use?

- {=5gr of almond
- ~0.8 gr of hazelnut
- ~6 gr of dried crust
- ~0.5 gr of hazelnut
- ~5gr of hazelnut}

The first functional test was worked out by:

{=Christiansen

- ~Rubinov
- ~Helman
- ~Oksman
- ~No correct answer}

In what age infantile type of swallowing is physiological?

{= Till 2-3 years

- ~ During primary dentition stage
- ~ 3 month after birth

- ~ Till 4-5 years
- ~ Till 1 year}

Methods of swallowing investigation are:

{=Functional test of Frankel, linguodynamometry, electromyography

- ~ Functional test of Frankel, anthropometric method
- ~ Symmetrography, symmetroscopy
- ~ Gench's test, Stange's test
- ~ Spirometry, functional test of Frankel}

If child has a mouth breathing, what facial signs would be?

- {= Lowering of the lower jaw, "double chin", smoothed nasolabial folds
- ~ Convex profile, decreased nasolabial angle
- ~ Flat supramental fold, concave profile
- ~ Protruded chin, open mouth, "adenoid" expression of face
- ~ All correct answer}

A 5-years old child has space between upper and lower incisors 2 mm. There is chin and lips contraction during swallowing. For which muscles should dentist prescribe myogymnastics?

- {= Tongue muscles
- ~ Orbicular muscle of the mouth
- ~ Mastication muscles
- ~ Temporal muscles

~ No correct answer}

A 10-years old child has mouth breathing. Extraoral signs: narrow face, long lower 1/3 of the face, mouth is open, nasolabial folds are shallow. What could be the intraoral signs?

{= Narrow upper dental arch, open bite, protrusion of upper frontal teeth

- ~ Distal bite, crowding
- ~ Open bite, supraposition of lower canines
- ~ Deep bite, abnormal position of upper incisors
- ~ Gothic palate, deep bite}

The parents of 6-years old child complains on speech problems and malocclusion. What diagnostic methods should dentist use?

{=Clinical examination + functional tests

- ~ Clinical examination + biometric method
- ~ Cephalometric analysis
- ~ Clinical examination + X-ray
- ~ Clinical examination}

What is the most common cause of speech problems?

{=Abnormal tongue frenulum

- ~Distal bite
- ~ Mesial bite
- ~Abnormal labial frenulum

~ Deep bite}
What is the most common cause of mastication problems?
{= Premature loss of teeth
~Early teeth eruption
~Abnormal upper labial frenulum
~Abnormal lower labial frenulum
~ Abnormal tongue frenulum}
What muscles are more mature in infant?
{=Lips and frontal parts of a tongue
~ Muscles which move a jaw left-right
~ No correct answer
~ Posterior parts of a tongue
~ Mastication muscle}
A 5-years-old child has infantile type of swallowing. What type of malocclusion will develop?
{= Open bite
~ Cross bite
~ Distal bite
~ Nothing
~ Deep bite}

A 9-years — old child had one-side mastication during 2 years. What type of malocclusion could develop?

- {= Assymetrical malocclusion
- ~ Open bite, narrow lower dental arch
- ~ Malpositions in vertical plane
- ~ Distal bite
- ~ Mesial bite}

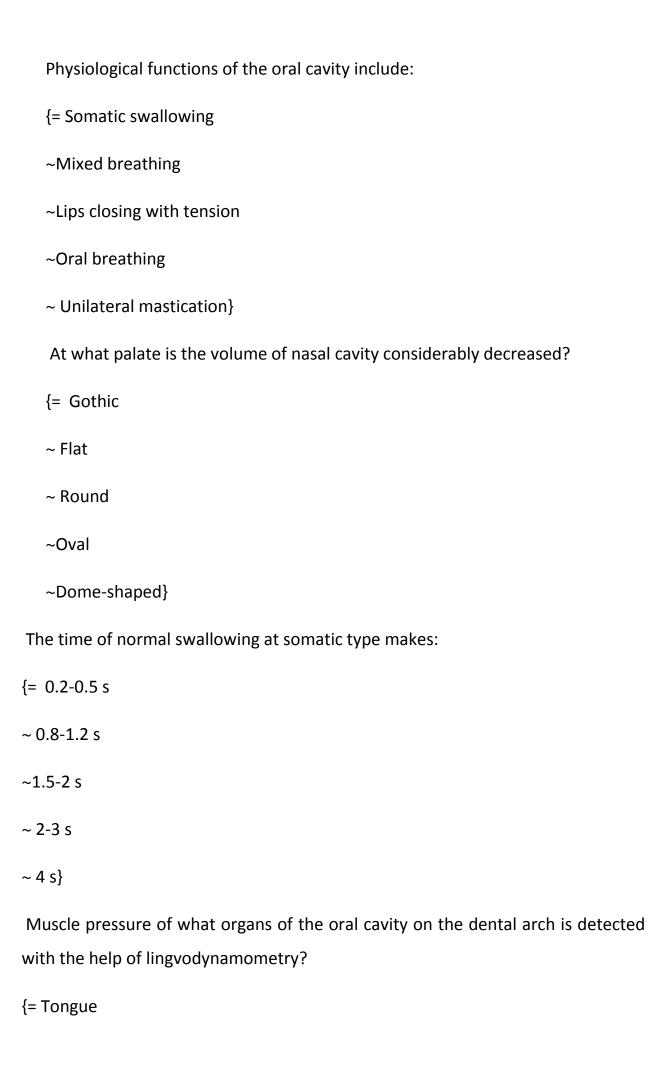
A 13-years-old girl has abnormal swallowing. How should dentist examine such patient to diagnose the type of swallowing?

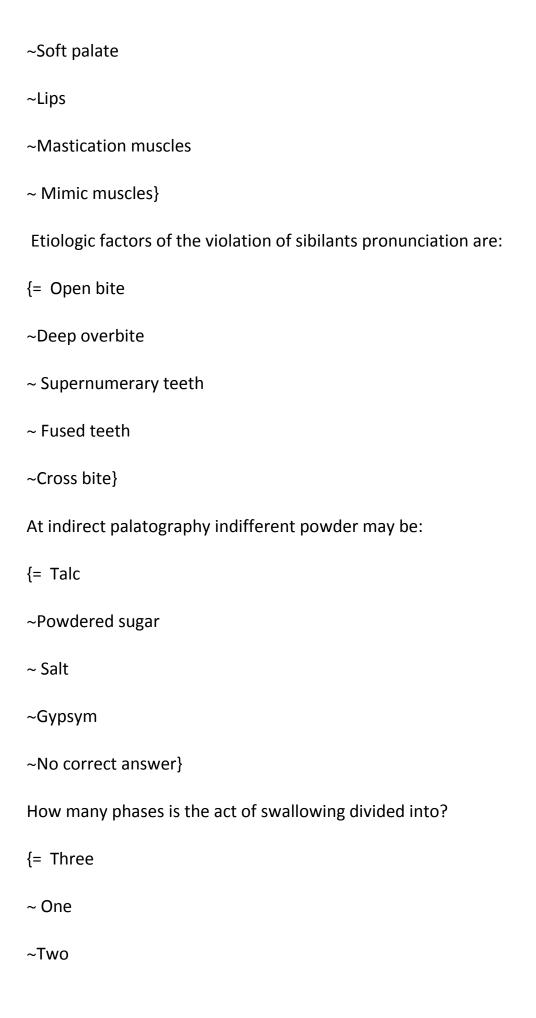
{=To make only clinical examination

- ~ To study models
- ~ To do X-ray
- ~ Spirometry
- ~ Gench's test, Stange's test}

A 8-years-old boy has mouth breathing and aesthetic problem. During clinical examination dentist diagnosed malocclusion. In which plane is it?

- {= Vertical plane
- ~Transversal plane
- ~ Saggital plane
- ~ Horizontal plane
- ~ No correct answer}





~Five}

Roentgenologic methods of investigation the dentist should use:

{=In cases when it`s necessary for diagnosis

- ~In each case during orthodontic treatment
- ~In children with primary dentition stage
- ~In narrow dental arch cases
- ~In children with mixed dentition stage}

### Intraoral roentgenologic methods are:

{=Intraoral roentgenography, TMJ tomography

- ~Orthopantomography, TMJ tomography
- ~Intraoral roentgenography, orthopantomography
- ~All the answers
- ~Orthopantomography}

### Extraoral roentgenologic methods are:

{=Orthopantomography, TMJ tomography, teleroentgenography

- ~Orthopantomography, roentgenography of palatine suture
- ~Roentgenography of 2-3 teeth
- ~All the answers
- ~Roentgenography of palatine suture}

## Orthopantomography the dentist should make:

{=All the answers

- ~After orthodontic reatment
- ~During orthodontic reatment
- ~Before orthodontic reatment
- ~Before orthodontic reatment and after orthodontic reatment}

If 8-years-old child has primary dentition stage, which roentgenologic methods can dentist use to define diagnosis?

{=Orthopantomography

- ~Teleroentgenography
- ~Intraoral roentgenography
- ~TMJ tomography
- ~No correct answer}

The 18-years old patient has distal bite and he is treated with brackets. All teeth are present, there are big fillings on 16,36,46 teeth, 36 tooth is grey. What diagnostic method had dentist use before orthodontic treatment?

- {=Orthopantomography
- ~Anthropometric methods
- ~Anthropometric methods and intraoral roentgenography
- ~Intraoral roentgenography
- ~TMJ tomography}

Hand-wrist roentgenography dentist can use:

- {=To clarify the stage of growth
- ~To clarify the diagnosis
- ~To clarify the diagnosis during primary dentition stage
- ~To establish the period of bone development and terms of teeth eruption
- ~No correct answer}

In which age and stage of development can dentist use hand-wrist roentgenography?

- {=In mixed dentition stage, 8-12 years
- ~In primary dentition stage, 8-12 years
- ~In mixed dentition stage, 6-7 years
- ~In permanent dentition stage
- ~All correct answer}

## Intraoral roentgenography shows:

- {=State of hard tissues, periodontal tissues, not erupted teeth and stage of their development, supernumerary teeth
- ~State of hard tissues, periodontal tissues, state of TMJ and palatine suture
- ~All the teeth (primary and permanent)
- ~Periodontal tissues, soft tissues, sinuses
- ~All correct answer}

In which cases should dentist make orthopantomography?

- {=When patient has abnormal teeth number, unerupted teeth
- ~When patient has molocclusion in sagittal plane
- ~When patient has molocclusion in transverse plane
- ~When patient has crowding

~No correct answer}

The 9-years old child has primary lower incisors. What dentition stage must be in this age? What diagnostic method should dentist use?

{=Mixed dentition stage, orthopantomography

- ~Primary dentition stage, orthopantomography, Pont's method
- ~Permanent dentition stage, teleroentgenography, Snagina's method
- ~Primary dentition stage, intraoral roentgenography
- ~No correct answer}

The 7-years old child has diastema. Upper labial frenulum is normal. What diagnostic method should dentist use?

{=Intraoral roentgenography

- ~Gerlach`s method
- ~Pont`s method, orthopantomography
- ~Hand-wrist roentgenography
- ~No correct answer}

To clarify the stage of growth and development the dentist should use? {=Hand-wrist roentgenography

- ~Teleroentgenography
- ~Intraoral roentgenography
- ~Gerlach`s method
- ~No correct answer}

The 13-years old child has primary 75 tooth. What dentition stage must be in this age? What diagnostic method should dentist use?

{=Permanent dentition stage, intraoral roentgenography

- ~Mixed dentition stage, orthopantomography
- ~Mixed dentition stage, intraoral roentgenography
- ~Permanent dentition stage, orthopantomography
- ~No correct answer}

The dentist should make hand-wrist roentgenography:

{=When there is a growing patient, before orthodontic treatment or during treatment

- ~When the patient is older than 13 years, before orthodontic treatment or during treatment
- ~In adult patient
- ~In children, in primary dentition stage

~No correct answer}

Spot-film radiography gives information about:

{=The 1<sup>st</sup>-3<sup>rd</sup> teeth and alveolar process around them

- ~The symmetry of the right and left halves of jaws
- ~The 1st tooth and the adjacent alveolar process
- ~Upper teeth
- ~Lower teeth}

To characterize the condition of TMJ one should conduct:

{=Panoramic radiography

- ~Radiography by Parm`s technique
- ~Spot-film radiography
- ~Teleroentgenography
- ~Axial roentgenography}

Orthopantomography is used in orthodontics to find:

{=The presence of permanent teeth germs

- ~The length of the upper jaw
- ~The length of the lower jaw
- ~TMJ structure
- ~The structure of the middle third of the cranium}

To find the dimensions of the joint space it is expedient to do:

{=Computerized axial tomography

- ~Panoramic radiography
- ~Spot-film radiography
- ~Radiography by Parm`s technique
- ~Radiography by Schuller`s technique}

What method of roentgen diagnostic allows detecting the condition of the periodontal tissues of the upper and lower jaw?

{=Panoramic radiography

- ~Orthopantomography
- ~Intraoral roentgenography
- ~Computerized axial tomography
- ~Radiography by Schuller`s technique}

How is marked the nasal vertical plane by Dreyfus?
{=Pn
~Po
~N
~Se

~No correct answer}

For the interpretation of the lateral teleroentgenogram it is used Frankfort horizontale plane (H) or (FH). What points does it join?

{=Orbital and condilen

- ~Nasion and sella turcica
- ~Gnathion and sella turcica
- ~Spina nasalis anterior and spina nasalis posterioir
- ~No correct answer}

Schwarz recommends to estimate the profile form by:

{=All answers are correct

- ~The position of lips and the relation of the mouth tangent T to Pn and Po
- ~By the profile angle T
- ~By the proportionality of face parts
- ~By the profile angle T and by the proportionality of face parts}

What is the position of the point A (ss) – subspinale on the lateral teleroentgenogram:

- {=The most posterior located point on the anterior circuit of the apical basis of the upper jaw
- ~The most posterior located point on the anterior circuit of the apical basis of the lower jaw
- ~The lowest point of the anterior margin of the great occipital foramen in the medium-sagittal plane
- ~The point on the apex of the articular head circuit
- ~No correct answer}

## Teleroentgenogram helps:

{=All answers are correct

- ~To detect the peculiarities of the growth and development of the facial skeleton and the type of the growth
- ~To have a clear idea of the structure and correlation of the bony matrix with the soft tissues of face
- ~To choose the most efficient method of treatment
- ~To have a clear idea of the structure and correlation of the bony matrix with the soft tissues of face and to choose the most efficient method of treatment}

What is location of the point N (nasion) on the lateral teleroentgenogram?

- {=The union of the coronal and nasal bones in the medium-sagittal plane
- ~The place of the union of the posterior lower jaw margin and the external symphysis margin
- ~The most anterior point of the mental protuberance
- ~The most inferior point on the lower jaw symphysis
- ~No correct answer}

What is location of the point Po on the lateral teleroentgenogram?

{=On the superior circuit of the external acoustic duct, touches the Frankfort

- ~The most located point of the inferior orbit margin
- ~The most inferior point on the lower jaw symphysis
- ~The apex of the anterior nasal spine
- ~The union of the coronal and nasal bones in the medium-sagittal plane}

What is location of the point Gn (gnathion) on the lateral teleroentgenogram?

{=The place of the union of the posterior lower jaw margin and the external symphysis margin

- ~The most anterior point of the mental protuberance
- ~The most inferior point on the lower jaw symphysis
- ~The apex of the anterior nasal spine
- ~On the external lower jaw margin at its intersection with the bisectrix of the angle}

What is the aim of craniometric investigation:

{=To detect the position of the jaws relative to the plane of the anterior part of the cranium base

- ~To detect the position of the jaws relative to the mandibular plane
- ~To detect the position of the jaws relative to the Frankfort

Horizontal

- ~To study the form of face profile
- ~No correct answer}

What is location of the point Se on the lateral teleroentgenogram?

{=In the middle of the opening in the Turkish saddle

- ~In the middle of the Turkish saddle
- ~The most anterior point of the mental protuberance
- ~The apex of the anterior nasal spine
- ~On the external lower jaw margin at its intersection with the bisectrix of the angle}

How is called the point, which is situated on the plane of the upper jaw base and is apex of the anterior nasal spine?

```
{=ANS
```

~Se

~S

~A

~P}

How is marked the plane of the lower jaw base, which joins gnathion and the most superiorly located point of the inferior circuit of the lower body?

{=MP

~H

~N-Se

~Pn

~A}

To detect the anterior position of the lower jaw one should apply the following roentgenologic method:

{=Teleroentgenography in lateral projection

- ~Teleroentgenography in frontal projection
- ~Orthopantomography

- ~Axial teleroentgenography
- ~Occlusive teleroentgenography}

What allows judging the symmetry of the right and left halves of the lower jaw?

- {=Teleroentgenography in frontal projection
- ~Teleroentgenography in lateral projection
- ~Panoramic radiography
- ~Orthopantomography
- ~Radiography by Schuller`s technique}

# Normally the SNA angle equals:

```
{=82°
```

~94°

~92°

~76°

~74°}

### Normally the SNB angle equals:

{=80°

~84°

~82°

~76°

~74°}

# Normally the ANB angle equals:

{=2°

~6°

~12°

~10°

~5°}

Roentgenologic methods of investigation the dentist should use:

{=In cases when it`s necessary for diagnosis

- ~In each case during orthodontic treatment
- ~In children with primary dentition stage
- ~In narrow dental arch cases
- ~In children with mixed dentition stage}

If 8-years-old child has primary dentition stage, which roentgenologic methods can dentist use to define diagnosis?

{=Orthopantomography

- ~Teleroentgenography
- ~Intraoral roentgenography
- ~TMJ tomography
- ~No correct answer}

The 18-years old patient has distal bite and he is treated with brackets. All teeth are present, there are big fillings on 16,36,46 teeth, 36 tooth is grey. What diagnostic method had dentist use before orthodontic treatment?

{=Orthopantomography

- ~Anthropometric methods
- ~Anthropometric methods and intraoral roentgenography
- ~Intraoral roentgenography

~ The degree of formation, or resorption of the root

~TMJ tomography}

```
Dentures in children are used for:
{=To restore the function of chewing, speech, aesthetics
~To improve the hygienic condition of the oral cavity
~To relax the chewing muscles
~ For therapeutic purposes
~ No correct answer}

The function of chewing depends on:
{=All correct answers
~The integrity of the dentition, the nature of the bite
~ Periodontal status
```

~Training of the neuromuscular apparatus and the psychological state of the child}

Why in children with defects of the dental arches, teeth that are in the oral cavity cannot compensate the lost function:

- { = Undistorted compensatory mechanisms
- ~ Underdeveloped muscles
- ~ Insufficiently formed periodontal ligaments
- ~Unformed joint
- ~Immature hard tissues of teeth}

When diagnosing a defect of dental arch, it should reflect:

- { = Etiological factor, morphological, functional characteristics
- ~ Etiological factor
- ~Morphological characteristics
- ~ Functional characteristics
- ~ Morphological and functional characteristics}

Why do we need to conduct anthropometric studies at defects of dental arches?

- {= To study the morphological features of the relationship between the dental arches, clarify the diagnosis
- ~ To determine the functional disorders
- ~ To determine the degree of occurrence of permanent tooth follicles
- ~ To determine the number of missing teeth
- ~ To determine the teeth which limites the defects of dental arches}

```
Why do we need to conduct the roentgenological studies at defects of dental
arches?
{= To clarify the diagnosis, determine the plan and prognosis of treatment
~To determine the functional disorders
~ To determine the number of missing teeth
~To determine the teeth which limites the defects of dental arches
~To determine the degree of occurrence of permanent tooth follicles}
The size of the defects of dental arches according to the Vasilenko-Trill
classification is divided into:
{=Small, medium and large
~ Small and Medium
~Medium and large
~Small and large
~ No correct answer}
From what age can we use prosthetic treatment in children:
\{=2.5 \text{ years}
~ After a complete physiological change of the temporary teeth
~ 5 years
~ With the beginning of physiological change of the front teeth
~ From the eruption of the first permanent molars}
```

```
What is the general indications for prosthetic treatment in children:
{ = All correct answer
~ Tooth extraction one year before the physiological change
~Aesthetic defects with speech impairment
~The need to stimulate the process of teething
~ Partial and plural adentia }
 In temporary and mixed dentition, the teeth which limits the defects of dental
arches have the following properties:
{ = Move in the defects direction
~ Tip in the defects direction
~Not change the position
~ Rotate about its axis
~ Move in the vestibuloral direction}
In which direction the teeth have the property of changing their position:
{= in all}
~ vestibular
~ medial
~ Oral
~ Rotate about its axis}
```

When does band and loop space maintainer is used?

{=Premature loss of first or second primary molars

~ Premature loss of central, lateral primary incisors and canines

- ~ Premature loss of primary incisors
- ~ Premature loss of canines
- ~No correct answer~}

The patient is 6 years old. The appliance is cemented on the two lower permanent molars. Fixed bilateral space maintainers on the mandibular arch often are called:

{= Lingual arch space maintainers

- ~ Band and loop space maintainers
- ~ Crown and loop space maintainers
- ~ Nance appliance
- ~ No correct answer}

The parents of 3.5 – year-old girl complains of the labored mastication of the child. Objectively: a defect of a dental arch is on a lower jaw. Making of partial removable prosthetic appliances is appointed. Indicate the terms of changing of the partial removable prosthetic appliances in the primary dentition after Iljina-Markosjan.

{= 6-8 months

- ~ 1.5 years
- ~ After the physiological change of teeth
- ~ 4 months
- ~ 10 months}

Space maintainer is an intra-oral appliance used to:

{= Preserve arch length following the premature loss of primary teeth\tooth

- ~ Break infantile swallowing
- ~ Break harmful habit lip biting
- ~ Break harmful habit tongue thrusting
- ~ No correct answer}

A 7-year-old girl has premature loss of 55,54,64,65 teeth. It was indicated the removable space maintainer with artificial teeth on the upper jaw. What is the advantage of such appliance?

{= Can maintain space as well as aid in mastication

- ~ Better oral hegiene
- ~ Good fixation
- ~ Is not susceptible to fracture
- ~ No correct answer}

During examination of a 7-year-old boy it was revealed the multi-surface carious lesion in the 55 tooth. What treatment should be proposed in such situation?

- {= Metal crown
- ~ Metal band
- ~ Ceramic crown
- ~ Extraction of the 55 tooth and a space -maintainer
- ~ No correct answer}

In a 6-year-old boy the 75 tooth was extracted as a result of the long-term chronic process. What changes can be forecast in the dental arch without any treatment?

- {= Mesial drifting of the first permanent molar, dentoalveolar extrusion of the upper antagonist, distal movement of the first primary molar
- ~ No changes
- ~Rotation of the first permanent molar
- ~Distal movement of the first primary molar
- ~ No correct answer}

Why is a band and loop (or crown and loop) space maintainer not indicated in the premature loss of a primary second molar?

{=The abutment tooth would be lost and the space maintainer would no longer be effective

- ~ Possibility of caries formation on the occlusal surface of the second primary molar
- ~ The primary second molar could be broken
- ~ Possibility of caries formation on the occlusal surface of the second primary molar and the primary second molar could be broken
- ~No correct answer}

The primary second molar is prematurely extracted in a 6-year-old boy. When does space closure can occur?

- {= In the period of the first 6 months after extraction
- ~In the period of 1st year after extraction
- $\sim$  In the period of  $2^{nd}$  year after extraction
- ~ In the period of the first 2 months after extraction
- ~ No correct answer}

A 17 years old child has 13 tooth retained. The space between 12 and 14 is 4 mm. What are the treatment steps?

{=Expand the dental arch, expose the crown of 13 tooth, move it in dental arch

- ~Expose the crown of 13 tooth and leave it to erupt itself
- ~Expose the crown of 13 tooth and move it in dental arch
- ~Leave 13 tooth in bone, close the space
- ~ No right answer

A 9 years old child has 11 tooth retained. The space between 12 and 21 is 5 mm. What treatment method should dentist use?

- {=Surgical and orthodontic methods
- ~Surgical method
- ~Orthodontic method
- ~Prosthetic method
- ~No right answer

The aim of compact osteotomy is:

- {=Removal of compact bone layer
- ~Tooth torsion and setting in the dental arch
- ~Exposure of the retained tooth crown
- ~To reduce teeth number if no enough space in dental arch
- ~No right answer

The corticotomy methods are:

- {=Linear or ribbond; checkerboarded or latticed; tunnel; combined
- ~Linear or ribbond; tunnel; combined

- ~Compact and osteoectomy
- ~No right answer
- ~ All the answers

Shorten upper lip frenulum in 10 years old child is a risk factor of:

- {=Diastema
- ~Crowding on upper dental arch
- ~Open bite
- ~Distal bite
- ~No right answer

The child with late period of mixed dentition stage has space between upper central incisors 3 mm. What additional diagnostic method should dentist use?

- {=Roentgenologic investigation of the alveolar process in the region of central incisors roots
- ~Orthopantomography
- ~Anthropometric measurement by Snagina
  - ~Anthropometric measurement by Gerlach
  - ~No right answer

What are the indications for surgical treatment of lower lip frenulum?

- {=Local periodontium diseases
- ~Crowding on lower dental arch
- ~Narrow lower dental arch
- ~No right answer
- ~ All the answers

A 14 years old child has 23 tooth retained. The space between 22 and 24 is 2mm. What are the treatment steps?

{=Create the space, expose the crown of 13 tooth and move it in dental arch

- ~Extract 23 tooth, close the space
- ~Expose the crown of 13 tooth and move it in dental arch
- ~Leave 23 tooth till the end of growth, then use orthodontic appliances
- ~No right answer

Surgical treatment methods orthodontist can use:

- {=All the answers
- ~Before orthodontic treatment
- ~During orthodontic treatment
- ~As separate treatment method
- ~No right answer

Surgical methods orthodontist use:

- {=All the answers
- ~On soft tissues
- ~On teeth
- ~On alveolar bone
  - ~ On dental arches

Compact osteotomy is indicated:

- {=To fasten orthodontic treatment at severe dentognathic deformations
- ~To expose the crown of retained tooth
- ~In case of distal bite

```
~No right answer
  ~ All the answers
Shorten tongue frenulum is a risk factor of:
       {=Problems with swallowing and sounds pronunciation
      ~Problems with chewing
   ~Development of cross bite
      ~Crowding
  ~ All the answers
How many tongue frenulum types do you know?
      {=5
   ~2
      ~4
      ~6
      ~3
Where is normal tongue's tip position?
   {=Behind the lower incisors
      ~Behind the upper incisors
  ~Between the incisors
  ~ All the answers
```

~No right answer

Surgical treatment methods orthodontist can use:

```
{=All the answers
```

- ~On bones and soft tissues
- ~On teeth
- ~On alveolar bone
- ~ On dental arches

Which from the following muscles are the depressor muscles of the lower jaw?

{=Geniohyoid muscle, mylohyoid muscle, digastric muscle

- ~Digastric muscle, geniohyoid muscle, buccinator
- ~Depressor muscle of the lower lip, mylohyoid muscle, mentalis muscle
- ~Geniohyoid muscle, buccinator, mentalis muscle
- ~Risorius muscle, mylohyoid muscle, mentalis muscle}

Who was the author of the rules at the basis of the technique of myogymnastics?

{=Rogers

- ~Schwarz
- ~ Angle
- ~ Korkhaus
  - ~Flis}

The orthodontist indicated for a 4-year-old boy to do such exercise: the lips are pulled out (like for whistling), and then spread as at a wide smile.

This position of lips should be alternated. In what case this exercise is useful?

{=Disturbance of the function of orbicularis oris muscle

- ~Mesial bite
- ~Open bite
- ~Cross bite
- ~Distal bite}

It was indicated the following myogymnastic exercise for a 6-year-old boy: at the head slightly thrown back the mouth is opened and closed alternately, at that moment the child tries to reach the most posterior region of the hard palate with the tip of the tongue. In what case this exercise is useful?

{=Mesial bite

- ~Disturbance of the function of orbicularis oris muscle
- ~Open bite
- ~Cross bite
- ~Distal bite}

What is the function of the mastication muscle?

{=During contraction to lift the lower jaw pressing the lower teeth to the upper ones, taking part in protruding the lower jaw

- ~To open the oral fissure, to protrude lips
- ~To promote tight pressure of lips, their retraction
- ~To lift the angle of the mouth upwards and to the side
- ~To pull the mouth laterally, thereby shortening the cheek, and as an aid in keeping food on the chewing surfaces of the teeth}

What is the function of the medial pterygoid muscle?

{=At bilateral contraction to promote protrusion of the lower jaw, at unilateral – its shifting in the opposite direction

- ~To lift the lower jaw
- ~To lower the lower jaw
- ~To lift the upper lip, to deepen the wings of nose
- ~To lift the angle of the mouth upwards and to the side}

From what branchial arch the facial muscle differ?

~1<sup>st</sup>

~ 3<sup>rd</sup>

~4<sup>th</sup>

~5<sup>th</sup>}

Which from the following muscles refer to the muscles of expression?

{= Transverse muscle of chin, mental muscle, elevator muscle of upper lip and wing of nose, buccinators

- ~ Orbicularis oris muscle, mastication muscle
- ~ Elevator muscle of upper lip, temporal muscle, buccinators
- ~ Temporal muscle, buccinators, risorius muscle, elevator muscle of upper lip and wing of nose
- ~ Orbicularis oris muscle, mastication muscle, risorius muscle}

Mother of an 5-year-old boy appealed to the orthodontist for a consultation. The following myogymnastic exercise was proposed for the

child: to bite an eraser or a pen covered with rubber with lateral teeth. What diagnosis was set by the orthodontist?

{=Open bite

- ~Disturbance of the function of orbicularis oris muscle
- ~ Mesial bite
- ~ Cross bite
- ~ Distal bite}

What are the rules of myogymnastic exercises?

{=All answers are correct

- ~ Traction are to be carried out with at least amplitude, the intensity of such muscles contractions should correspond to their physiological function, should not be excessive
- ~ The speed and duration of tractions is to be adapted to the peculiarities of this movement: at first they are to be slow, continuous and conducted regularly
- ~ There should be a rest pause between two consequent tractions
- ~ Tractions should repeat at every exercise and last till the appearance of light local fatigue sensation}

What is the function of the lateral pterygoid muscle?

- {= At bilateral contraction protrudes the lower jaw considerably, pulls forward the articular capsule and disk of the TMJ; at unilateral –shifts the lower jaw in the opposite direction
  - ~ Pulls the angle of mouth outwards, its bundles attach to the skin of cheeks, as a result of which dimples appear during laughter

- ~ Pulls the angle of mouth aside, at bilateral contraction presses the cheeks to the teeth, strains the oral fissure, takes part in the act of sucking, speaking, blowing cheeks out
- ~ Lifts the chin skin, forming dimples on it; can lift the lower lip slightly, and also throw it out
- ~ Opens the oral fissure, presses and protrudes lips}

#### What is the function of the risorius muscle?

{=Pulls the angle of mouth outwards, its bundles attach to the skin of cheeks, as a result of which dimples appear during laughter

- ~ Pulls the angle of mouth aside, at bilateral contraction presses the cheeks to the teeth, strains the oral fissure, takes part in the act of sucking, speaking, blowing cheeks out
- ~ Lifts the chin skin, forming dimples on it; can lift the lower lip slightly, and also throw it out
- ~ Opens the oral fissure, presses and protrudes lips
- ~ At bilateral contraction protrudes the lower jaw considerably, pulls forward the articular capsule and disk of the TMJ; at unilateral –shifts the lower jaw in the opposite direction}

### What is the function of the buccinator muscle?

{=Pulls the angle of mouth aside, at bilateral contraction presses the cheeks to the teeth, strains the oral fissure, takes part in the act of sucking, speaking, blowing cheeks out

Lifts the chin skin, forming dimples on it; can lift the lower lip slightly, and also throw it out

~ Opens the oral fissure, presses and protrudes lips

- ~ At bilateral contraction protrudes the lower jaw considerably, pulls forward the articular capsule and disk of the TMJ; at unilateral –shifts the lower jaw in the opposite direction
- ~ Pulls the angle of mouth outwards, its bundles attach to the skin of cheeks, as a result of which dimples appear during laughter}

#### What is the function of the mental muscle?

{=Lifts the chin skin, forming dimples on it; can lift the lower lip slightly, and also throw it out

- ~ Opens the oral fissure, presses and protrudes lips
- ~ At bilateral contraction protrudes the lower jaw considerably, pulls forward the articular capsule and disk of the TMJ; at unilateral –shifts the lower jaw in the opposite direction
- ~ Pulls the angle of mouth outwards, its bundles attach to the skin of cheeks, as a result of which dimples appear during laughter
- ~ Pulls the angle of mouth aside, at bilateral contraction presses the cheeks to the teeth, strains the oral fissure, takes part in the act of sucking, speaking, blowing cheeks out}

What is the function of the orbicularis oris muscle?

{=Opens the oral fissure, presses and protrudes lips

- ~ At bilateral contraction protrudes the lower jaw considerably, pulls forward the articular capsule and disk of the TMJ; at unilateral –shifts the lower jaw in the opposite direction
- ~ Pulls the angle of mouth outwards, its bundles attach to the skin of cheeks, as a result of which dimples appear during laughter

- ~ Pulls the angle of mouth aside, at bilateral contraction presses the cheeks to the teeth, strains the oral fissure, takes part in the act of sucking, speaking, blowing cheeks out
- ~ Lifts the chin skin, forming dimples on it; can lift the lower lip slightly, and also throw it out}

The facial muscles take part in the next movements:

{=Act of speaking, swallowing, mastication, breathing

- ~Act of speaking and mastication
- ~Closing and opening the mouth
- ~Closing and opening the eyes
- ~No correct answer}

Which of the next muscles takes part in the act of sucking and speaking?

{=Buccinator (musculus buccinator)

- ~Risorius muscle (musculus risorius)
- ~Mental muscle (musculus mentalis)
- ~Lesser zygomatic muscle (musculus zygomaticus minor)
- ~Greater zygomatic muscle (musculus zygomaticus major)}

Which muscle mostly takes place in the act of sucking by the protrusion of lower jaw during the 1<sup>st</sup> year of life?

{=Lateral pterygoid muscle

- ~Temporal muscle
- ~Risorius muscle
- ~Elevtor muscle of angle of mouth
- ~Mastication muscle}

Which group of muscles moves the lower jaw down and open the mouth?

{=The geniohyoid muscle, mylohyoid muscle, digastric muscle

- ~Digastric muscle, geniohyoid muscle, buccinator
- ~Depressor muscle of the lower lip, mylohyoid muscle, mentalis muscle
- ~Geniohyoid muscle, buccinator, mentalis muscle
- ~Risorius muscle, mylohyoid muscle, mentalis muscle}

## Named the masticatory muscles:

- {=The mastication muscle, temporal muscle, medial pterygoid muscle, lateral pterygoid muscle
- ~The mastication muscle, medial pterygoid muscle, lateral pterygoid muscle
- ~The temporal muscle, digastric muscle, geniohyoid muscle
- ~All the answers
- ~ The temporal muscle, digastric muscle, the mastication muscle}

In which age of patient do we prescribe myogymnastics?

{=In any age

- ~In young preschool age (3-6 years)
- ~In 6-9 years
- ~In 10-13 years
- ~No correct answer}

In which stage of occlusion's development do we prescribe myogymnastics?

{=It doesn`t depend on stage of development

- ~During primary dentition stage
- ~During early mixed dentition stage
- ~During late mixed dentition stage
- ~During permanent dentition stage}

With which treatment method do we usually prescribe myogymnastics?

{=All the answers

- ~At the same time when patient use orthodontic appliances
- ~After surgical treatment method
- ~As separate treatment method
- ~Before treatment with orthodontic appliances}

In which cases should dentist prescribe myogymnastics?

{=If patient has open bite, distal bite, cross bite

- ~If patient has open bite, narrow dental arches
- ~If patient has deformations of dental arches in transverse plane
- ~If patient has individual malpositions

~If patient has deformations of dental arches in vertical plane}

For what muscle's groups can dentist prescribe myogymnastics?

- {=Facial muscles, masticatory muscles
- ~Only masticatory muscles
- ~Only facial muscles
- ~Depressor muscles of lower jaw
- ~No correct answer}

The myogymnastics is the method of:

- {=Prevention and treatment of malocclusion
- ~Prevention of malocclusion
- ~Treatment of malocclusion
- ~Normalization of occlusion development
- ~Stimulation of occlusion development}

A 4 years old child has normal molar relation, upper incisors are in contact with lower incisors, mouth breathing. Should the dentist prescribe myogymnastics?

- {=Yes, with the preventive purpose
- ~No, because the occlusion is normal
- ~Yes, for normalization of buccal teeth correlation
- ~No, because there is the contact between incisors
- ~Yes, with the treatment purpose}

A 14 years old child has molar relation I class by Angle, the vertical space between upper and lower incisors is 1.5 mm, narrow dental arches, mouth breathing. What treatment methods should dentist use?

- {= Myogymnastics and treatment with appliances
- ~Myogymnastics
- ~Removable appliances
- ~Fixed appliances
- ~Myogymnastics and supervision}

A 6 years old child has molar relation II class by Angle, the horizontal space between upper and lower incisors is 3.5 mm, normal width of dental arches, harmful habit of finger sucking. What treatment method should dentist use?

{=Myogymnastics and supervision

- ~Removable appliances
- ~Fixed appliances
- ~Myogymnastics and fixed appliances
- ~No correct answer}

A 3 years old child has normal molar relation, the overjet is 4mm, dental arches are normal shape, harmful habit of thumb sucking. What treatment method should dentist use?

{=Myogymnastics

- ~Psychotherapy
- ~Removable appliances
- ~Examine the child after eruption of 1<sup>st</sup> permanent molars
- ~Myogymnastics and removable appliances}

## What is massage?

{=Mechanical irritation of tissues used for the purpose of treatment

- ~ Tissue coagulation necrosis
- ~ Aseptic inflammation formation
- ~ Destructive influence on soft tissues
- ~ Influence on the acupuncture points}

## Vacuum therapy is:

{=Low pressure application for the purpose of treatment

- ~High pressure application for the purpose of treatment
- ~Mechanical irritation of tissues used for the purpose of treatment
- ~Destructive influence on soft tissues
- ~Influence on the acupuncture points}

What activity ultrasound has?

{=All correct answer

- ~Antiinflammatory
- ~Analgetic
- ~Resolving
- ~Desensetizing and fibrinolitic}

What is phonophoresis?

{= Intruduction of medical substances with the help of ultrasound

- ~ Application of an alternating magnetic field of low frequency with a therapeutic purpose
- ~ Low pressure application for the purpose of treatment
- ~ High pressure application for the purpose of treatment
- ~ No correct answer}

How many types of the tongue frenulum does F.Y. Khoroshilkina differentiate?

{=5

- ~2
- ~3
- ~4
- ~6}

## Compact osteotomy is conducted to:

- {=Shorten the terms of orthodontic treatment
- ~Jaw shortening
- ~Jaw growth stimulation
  - ~Improve the patient's esthetic appearance
  - ~No correct answer}

### Magnetic- resonance therapy is:

- {=Electromagnetic millimeter waves influence
- ~Mechanical irritations of tissues
- ~Low-frequency alternating magnethic field
- ~Aseptic inflammation formation
- ~No correct answer}

## Magnethotherapy is:

- {=Low-frequency alternating magnethic field
- ~High-frequency alternating magnethic field
- ~Constant frequency alternating magnethic field
- ~Different magnets application
- ~Intruduction of medical substances with the help of ultrasound}

Vibration stimulation is?

{=Application of low-frequency mechanical oscillations

- ~Low-frequency alternating magnethic field
- ~Mechanical irritations of tissues
- ~Destructive influence on soft tissues
- ~No correct answer}

How is called the method of dosed vacuum influence on the mucous membrane and bony tissues and whom it was worked out?

```
{=Vacuum therapy, V.I.Kulazhenko
```

- ~Massage, T.V. Kovalenko
- ~Ultrasound, A.N. Chumakova
- ~Vacuum therapy, A.N. Chumakova
- ~No correct answer}

Who offered the system of exercises for the prevention and treatment of malocclusion?

```
{=Rogers
```

- ~Hotz
- ~Frankel
- ~Angle
- ~Andresen}

Surgical methods orthodontist use:

```
{=All the answers
```

~On soft tissues

- ~On teeth
- ~On jaws
- ~On teeth and jaws}

Compact osteotomy is indicated:

{=To fasten orthodontic treatment at severe dentognathic deformations

- ~To expose the crown of retained tooth ~In case of distal bite ~No right answer ~In case of open bite}
- Shorten tongue frenulum is a risk factor of:
  - {=Problems with swallowing and sounds pronunciation
  - ~Problems with chewing
  - ~Development of cross bite
  - ~Crowding
  - ~No correct answer}
- A 9 years old child has 11 tooth retained. The space between 12 and 21 is 5 mm. What treatment method should dentist use?
  - {=Surgical and orthodontic methods
  - ~Surgical method
  - ~Orthodontic method
  - ~Prosthetic method
  - ~Therapeutic method}
- The aim of compact osteotomy is:
  - {=Removal of compact bone layer
- ~Tooth torsion and setting in the dental arch
  - ~Exposure of the retained tooth crown
  - ~To reduce teeth number if no enough space in dental arch
- ~No correct answer}
- The corticotomy methods are:

{=Linear or ribbond; checkerboarded or latticed; tunnel; combined

- ~Linear or ribbond; tunnel; combined
- ~Compact and osteoectomy
- ~No correct answer
- ~Linear or ribbond}

Shorten upper lip frenulum in 10 years old child is a risk factor of:

{=Diastema

- ~Crowding on upper dental arch
- ~Open bite
- ~Distal bite
- ~All correct answer}

The orthodontist indicated for a 4-year-old boy to do such exercise: the lips are pulled out (like for whistling), and then spread as at a wide smile. This position of lips should be alternated. In what case this exercise is useful?

{=Disturbance of the function of orbicularis oris muscle

- ~Mesial bite
- ~Open bite
- ~Cross bite
- ~Distal bite}

It was indicated the following myogymnastic exercise for a 6-year-old boy: at the head slightly thrown back the mouth is opened and closed alternately, at that moment the child tries to reach the most posterior region of the hard palate with the tip of the tongue. In what case this exercise is useful?

{=Mesial bite

```
~Disturbance of the function of orbicularis oris muscle
    ~Open bite
    ~Cross bite
    ~Distal bite}

Hotz`s method is:
{=Multiple teeth extraction
    ~Teeth transfer in the dental arch
    ~Surgical procedures on the jaws
    ~Stimulation method
    ~Single-stage teeth torsion}
```

The method of serial teeth extraction by Hotz dentist use in case of:

{=Narrow dental arches, severe space deficiency in early mixed dentition

- ~Narrow dental arches, severe space deficiency in late mixed dentition
- ~Narrow dental arches, space deficiency in primary dentition
- ~Crowding of lower incisors
- ~Narrow dental arches, severe space deficiency in permanent dentition}

How many teeth does dentist extract in each dental arch segment due to the Hotz method:

```
{=3 teeth
~2 teeth
~4 teeth
~1 tooth
~5 teeth}
```

On which dental arch does dentist extract the teeth due to the Hotz method: {=On upper and lower dental arches

- ~ On upper dental arch
- ~On lower dental arch
- ~On the one side of dental arch (left)
- ~On the one side of dental arch (right)}

A 9 years old child has permanent incisors and first molars, III,IV,V teeth are primary. Upper lateral incisors are situated in supraocclusion and vestibular position, there are 2 mm place for each. Lower lateral incisors are situated in lingual position, there 2 mm place for each. Define the period of dentition and treatment methods:

{=Early mixed dentition, surgical method, starting from extraction of III <sup>rd</sup> teeth

- ~Mixed dentition, surgical method, starting from extraction of 2<sup>nd</sup> teeth
- ~Late mixed dentition, surgical method, starting from extraction of  $\,V^{\text{th}}\,$  teeth
- ~Mixed dentition, surgical method, starting from extraction of IV<sup>th</sup> teeth ~Late mixed dentition, surgical method, starting from extraction of III<sup>rd</sup> teeth}

A 9 years old child has permanent incisors and first molars, III, IV,V teeth are primary. Upper lateral incisors are situated in vestibular position and crowded, there are 4 mm place for each. Lower incisors are a little crowded. Define the period of dentition and treatment methods:

{=Early mixed dentition, treatment with appliances

- ~ Early mixed dentition, surgical method
- ~Mixed dentition, biological method
- ~Permanent dentition, do not need treatment
- ~ Late mixed dentition, treatment with appliances}

A 9 years old child has 11 tooth retained. The space between 12 and 21 is 5 mm. What treatment method should dentist use?

{=Surgical and orthodontic methods

- ~ Surgical method
- ~Orthodontic method
- ~ Prosthetic method
- ~ No correct answer}

A 14 years old child has 23 tooth retained. The space between 22 and 24 is 2 mm. What are the treatment steps?

{= Create the space, expose the crown of 23 tooth, move it in dental arch

- ~ Extract 23 tooth, close the space
- ~ Expose the crown of 23 tooth, move it in dental arch
- ~ Leave 23 tooth till the end of growth, then use orthodontic appliances
- ~ No correct answer}

A 17 years old child has 13 tooth retained. The space between 12 and 14 is 4 mm. What are the treatment steps?

{= Expand the dental arch, expose the crown of 13 tooth, move it in dental arch

- ~ Expose the crown of 13 tooth, move it in dental arch
- ~Expose the crown of 13 tooth and leave it to erupt itself
- ~ Leave 13 tooth in bone, close the space
- ~ No correct answer}

A 8 years old child has permanent incisors and first molars, IV,V teeth are primary. Upper canines were extracted 1 year ago. The spaces between upper lateral incisors and IV<sup>th</sup> teeth are about 0.5 mm on each side. Lower incisors are wide and crowded. Define the period of dentition and treatment methods:

- {= Early mixed dentition, surgical method, dispensary supervision
- ~ Late mixed dentition, surgical method
- ~ Permanent dentition, biological method
- ~ Permanent dentition, treatment with appliances
- ~No correct answer}

A 7 years old child has permanent central incisors and first molars, II,III, IV,V teeth are primary. Upper lateral incisors start to erupt and have about 4 mm of place each, their width is 6 mm each. The width of lower central incisors is 5mm each. Define the period of dentition and treatment methods: {=Early mixed dentition, dispensary supervision

- ~ Permanent dentition, biological method
- ~Mixed dentition, surgical method and fixed appliances
- ~ Early mixed dentition, surgical method
- ~ Late mixed dentition, surgical method}

At what period of development dentist can use the method of serial teeth extraction by Hotz?

- {= In early period of mixed dentition stage
- ~ In late period of mixed dentition stage
- ~In primary dentition stage
- ~ In permanent dentition stage
- ~ All correct answer}

What teeth does dentist extract due to the Hotz method:

- {=Primary first molars, primary canines, first permanent premolars
- ~Primary first molars, primary canines, second permanent premolars
- ~ Primary lateral incisors, first permanent premolars
- ~ First permanent premolars, second permanent premolars
- ~ First permanent premolars}

A child is 8 years old. There are complaints of overcrowded upper incisors. Objectively: the first molars closure is of Angle's I class, frontal overbite is orthognathic. The 12 and 22 teeth erupt palatinally with space deficiency of 2/3 of the tooth crown. The 11 and 21 teeth are 10mm each in cross-section. The child has inherited father's facial type with prognathism and macrodontia of the central incisors. Choose the preventive treatment, considering this hereditary pathology:

- {= Hotz serial extraction to reduce the dental arch
- ~Jaw expansion to provide the space for the 12 and 21 teeth
- ~Filing down of the 11 and 21 approximal surfaces to provide the space for the 12 and 22 teeth
- ~ Extraction of the 12 and 21 teeth to reduce the dental arch
- ~Massage of the 12 and 21 teeth area to stimulate their eruption}

The aim of compact osteotomy is:

- {=Removal of compact bone layer
- ~Tooth torsion and setting in the dental arch
- ~Exposure of the retained tooth crown
- ~To reduce teeth number if no enough space in dental arch
- ~No right answer

Shorten upper lip frenulum in 10 years old child is a risk factor of:

- {=Diastema
- ~Crowding on upper dental arch
- ~Open bite
- ~Distal bite
- ~No right answer

The child with late period of mixed dentition stage has space between upper central incisors 3 mm. What additional diagnostic method should dentist use?

{=Roentgenologic investigation of the alveolar process in the region of central incisors roots

- ~Orthopantomography
- ~Anthropometric measurement by Snagina
  - ~Anthropometric measurement by Gerlach
  - ~No right answer

What are the indications for surgical treatment of lower lip frenulum?

- {=Local periodontium diseases
- ~Crowding on lower dental arch
- ~Narrow lower dental arch
- ~No right answer
- ~ All the answers

Surgical treatment methods orthodontist can use:

- {=All the answers
- ~Before orthodontic treatment
- ~During orthodontic treatment
- ~As separate treatment method
- ~No right answer

Surgical methods orthodontist use:

- {=All the answers
- ~On soft tissues
- ~On teeth
- ~On alveolar bone
  - ~ On dental arches

```
Dilating \lozenge -spring was offered by:
{=Coffin
~ Andresen
~ Kalvelis
~Frenkel
~ Schwarz}
Structural components of functionally acting appliances are:
{= Buccal shields
~Expansive arch
~ Inclined plane
~ Occlusive side plates
~ Screw and labial bandages}
What group of muscles is influenced by functionally acting
appliances?
{= Expression
~Masticatory
~Muscles elevating and protruding the jaw
~ Muscles elevating the lower jaw
~ Combined group of muscles}
Structural components of functionally directing appliances are:
{= Inclined plane
~Expansive arch
~ Buccal shields
~ Occlusive side plates
~ Screw and labial bandages}
```

What group of muscles is influenced by functionally directing appliances?

- {= Masticatory
- ~ Expression
- ~ Muscles elevating and protruding the jaw
- ~ Muscles elevating the lower jaw
- ~Combined group of muscles}

Structural components of mechanically acting appliances are:

- {= Expansive arch
- ~ Inclined plane
- ~ Buccal shields
- ~ Occlusive side plates
- ~Screw and labial bandages}

Structural components of combained appliances are:

- {= Screw and labial bandages
- ~ Expansive arch
- ~ Inclined plane
- ~ Occlusive side plates
- ~ Buccal shields}

Which of these appliances is mechanically acting?

- {= Schwarz`appliance with retracting arch
- ~ Bynin`s gum shield
- ~ Katz` crown
- ~ Schwarz` gum shield

~ Bruckl's appliance}

Appliances of combined action:

{= Labial bandage+buccal shields

- ~ Screw+elastic pushers
- ~ Occlusive side plates+ inclined plane
- ~ Inclined plane+biting platform
- ~Screw+ inclined plane}

An 18-year-old patient with complaint of large diastem has made an appointment with prosthodontics specialist. Objectively: there is full lateral displacement of central incisors due to absence of the 12<sup>th</sup> and 22<sup>nd</sup> teeth. What instrument is the most advisable for moving the central incisors closer together? {=Korkhaus appliance

- ~Kalvelis appliance
- ~Simple cotton ligature
- ~Vasylenko appliance
- ~Begg appliance}

In a 7-year-old child the right mandibular molars overlap the maxillary molars, there are no other occlusion abnormalities. Size and shape of the lower dental arch are normal. Specify the appliance for the treatment of this abnormality:

{=Upper-jaw appliance with a sector expansion screw

- ~Upper-jaw appliance with a middle expansion screw
- ~Upper-jaw appliance with a right guide plane
- ~Angle`s coil spring
- ~Upper-jaw appliance with a left guide plane}

Examination of a 7-year-old child revealed that all temporary maxillary molars were extracted. Mandibular incisors were in contact with the palatal mucosa. What is the optimal doctor's tactics?

{=Fabrication of a removable laminar claspless denture for the maxillary teeth restoration

- ~Check-ups once a year until the eruption of permanent teeth
- ~Fabrication of a removable denture with clasp fixation for the maxillary teeth restoration
- ~Check-ups every six months until the eruption of permanent teeth
- ~Fabrication of an orthodontic device for the treatment of deep overbite}

Parents of a 5-year-old child consulted an orthodontist about mispronunciation of sounds by the child. Objectively: the child's face is unremarkable. The patient has deciduous dentition. There are 1-1.5 mm gaps in the frontal segment from 53 to 63. Occlusion in the sagittal and transversal planes is normal. What type of Frankel's functional regulator is used to treat the above –described malocclusion?

```
{=Type IV
```

- ~Type III
- ~Type I
- ~Type II
- ~All correct answer}

Examination of a 5—year-old child revealed reverse overlap of the incisors and canines. What is the most effective way of abnormal bite prevention at this age? {=Treatment with an orthodontic appliance

- ~Vestibular plate
- ~Myogymnastics
- ~Selective grinding of milk teeth tubercles
- ~Tongue frenulum plasty}

A 7-year-old child has protruding chin, the lower lip overlaps the upper one. There are diastema and trema between the lower incisors, the lower incisors overlap the upper incisors by 2/3 of the crown height. First permanent molars demonstrate Angle's class III relation, sagittal gap is 3mm. The correct doctor's tactics will be to:

{=Use Bruckl`s appliance

- ~Use Angle`s apparatus
- ~Use Bynin appliance
- ~Use Schwartz appliance
- ~Recommend a complex of myogymnastic exercises}

An orthodontist monitors a 4–year-old child with mouth breath. The child has a history of adenotomy. Objectively: primary dentition occlusion; the upper incisors overlap the lower ones by 1/3; distal surfaces of the second temporary molars are situated in the same vertical plane. What preventive device will help the child to give up the habit of mouth breath?

{=Standard Schonherr`s vestibular screen

- ~Rudolph`s appliance
- ~Vestibular and oral Kraus` screen
- ~Andresen-Haupl activator
- ~Frankel`s function regulator}

After a preventive orthodontic examination a 9-year-old child was diagnosed with mesial occlusion. The treatment of this pathology involves application of an apparatus with mechanic action. What working element is to be applied in the apparatus intended for the correction of this pathology?

{=Screw or spring

- ~Screw and bite plate
- ~Occlusal applications

- ~Elastics and buccal shields
- ~Inclined plane}

A 12-year-old patient was diagnosed with open bite and dentoalveolar elongation of lateral part of mandible. What construction of apparatus is required?

{=Upper jaw appliance with occlusive side plates

- ~Angle`s sliding face bow
- ~Herbst appliance
- ~Upper jaw appliance with a face bow
- ~Extraoral face bow}

An orthodontist has registered for regular check-ups a 3,5-year-old child, who has a bad habit of finger sucking and presents with infantile swallowing. On examination: milk occlusion, direct contact of incisors. What preventive appliance would be optimal in this case?

{=Schonherr's standard vestibular plate

- ~Vestibule-buccal shield
- ~Frankel's functional regulator
- ~Janssen's bionator
- ~Rudolf's plate with loops}

After adenotonsillectomia it is necessary to break the mouth breathing habit in a 4-year-old child. The orthodontist recommends application of an oral vestibular shield (Kerbitz' vestibular plate). Vestibular shield facilitates training of the following muscle:

{=Orbicular muscle

- ~Temporal muscle
- ~Masseter muscle
- ~Lateral pterygoid muscle

# ~Medial pterygoid muscle}

How did Schwarz divide forces by their value?

{=Strong, medium, small

- ~Continuous
- ~Discontinuous
- ~Low, high, narrow
- ~Optimal, non-optimal}

What does Henri-Schulz`law testify to?

{=Small forces stimulate, medium- inhibit, strong – break teeth transfer

- ~Small forces inhibit teeth transfer
- ~Big forces stimulate teeth transfer
- ~Medium forces stimulate teeth transfer
- ~Medium forces stimulate, small forces inhibit teeth transfer}

Small forces in orthodontics make up to:

```
{=28 g/cm<sup>2</sup>
~38 g/cm<sup>2</sup>
~5 g/cm<sup>2</sup>
~41 g/cm<sup>2</sup>
~64 g/cm<sup>2</sup> }
```

Which of these forces is the most optimal for teeth transfer?

```
{=28 g/cm<sup>2</sup>
13 g/cm<sup>2</sup>
5 g/cm<sup>2</sup>
18 g/cm<sup>2</sup>
64 g/cm<sup>2</sup> }
```

Which of these authors was engaged in investigations in the region of the palatine suture?

```
{=Mukhina A.D.
~Vasylevska Z.F.
~Vares E.Y.
~Anikiyenko A.A.
~Kalvelis D.A.}
```

What processes take place in periodontal tissues on the side of tension during orthodontic tooth movement?

```
{=Alveolar bone formation
```

- ~Alveolar bone resorption
- ~Periodontal soft tissues remodeling
- ~No correct answer
- ~Periodontal fibres remodeling}

What processes take place in periodontal tissues on the root surface during vertical tooth movement (extrusion)?

```
{=Alveolar bone formation
```

- ~Alveolar bone resorption
- ~Periodontal soft tissues remodeling
- ~No correct answer
- ~Periodontal fibres remodeling}

What processes take place in periodontal tissues on the root surface during vertical tooth movement (intrusion)?

```
{=Alveolar bone resorption
```

- ~Alveolar bone formation
- ~Periodontal soft tissues remodeling
- ~No correct answer

~Periodontal fibres remodeling}

What force types are used in orthodontics by the character of force development?

- {=Mechanical and functional
- ~Functional strong and medium
- ~Very soft force
- ~Functional medium
- ~No correct answer}

Where is located the center of tooth rotation?

- {=On border between the middle and apical third of the root
- ~In the middle of the root
- ~Between the middle and gingival third of the root
- ~On border between the crown and root
- ~No correct answer}

In the case of orthodontic treatment, the movement of permanent teeth should be performed:

- {= After the formation of the root of the tooth
- ~ During tooth root formation
- ~Before the formation of the root of the tooth
- ~ Regardless of tooth root formation
- ~All correct answers}

Under what factors does tooth movement depend on?

- {= All correct answers
- ~ No obstacles to movement
- ~Choosing the design of the orthodontic appliances
- ~The type of malocclusion and the extent of their manifestations
- ~ Age}

```
What is the source of power in mechanically acting appliances?
  {=The force developed by the appliance (elasticity of springs, screws)
  ~ The force of the masticatory muscles
  ~The power of facial muscles
  ~ The thrust force
   ~ All correct answers}
  The degree of tissue changes in orthodontic treatment depends on:
  {=The nature and duration of the active force, the reactivity of the
  organism
  ~ Active force, vertical movement
  ~ Morphological changes in horizontal movement
  ~ Prolonged intermittent force, bone resorption
   ~No correct answer}
   Where are the changes in the maxillofacial area during orthodontic tooth
  movement?
  {= All correct answers
  ~ In bone tissue
  ~ In the pulp of the tooth
  ~ In the joint, the muscles
   ~ In the periodontium, the hard tissues of the tooth}
   By the nature of action forces are:
  { = Constant and discontinous
```

```
~ Big and small
```

- ~ Mechanical and discontinous
- ~ Moderate and weak
- ~No correct answer}

The force that the spring for moving the teeth develops depends on:

```
{ = All correct answers
```

- ~ The diameter of the orthodontic wire
- ~Widths of working bends
- ~Elastic properties of orthodontic wire
- ~Number of working bends}

The direction of movement of teeth by springs depends on:

```
{ = The number of working bends
```

- ~ The diameter of the orthodontic wire
- ~Elastic properties of orthodontic wire
- ~ Length of active arm
- ~Working width bends}

At the application of which force during orthodontic treatment there is a danger of neurovascular bundle rupture, hemorrhage into the root apices, periodontium ruin and adhesion between the tooth and bone?

```
{=Up to 65 g/cm<sup>2</sup>

~Up to 28 g/cm<sup>2</sup>

~Up to 38 g/cm<sup>2</sup>

~Up to 85 g/cm<sup>2</sup>

~Up to 41 g/cm<sup>2</sup> }
```

At the application of which force during orthodontic treatment bigger than capillary pressure on the side of squeezing provokes anemia, blood congestion, the patient complains of painfullness by the type of initial periodontitis stages?

```
{=Up to 35 g/cm<sup>2</sup>
~Up to 28 g/cm<sup>2</sup>
~Up to 85 g/cm<sup>2</sup>
~Up to 41 g/cm<sup>2</sup>
~Up to 65 g/cm<sup>2</sup> }
```

What processes are in the basis of Flurence's theory?

{= Apposition, resorption

- ~ Apposition
- ~ Resorption
- ~Bony tissue elasticity
- ~ Apposition, resorption, bony tissue elasticity}

Oppenheim's theory drawbacks:

{= Teeth incline at transfer

- ~ Apposition, resorption
- ~ Corpus transfer of teeth
- ~Teeth roots are resolved
- ~ Teeth rotate}

The advantage of Kalvelis` theory over other theories:

{= Resorption-apposition processes run simultaneously both inside the socket and outside the alveolar process, the tooth is transferred gradually – inclining

- ~Bony tissue elasticity was taken into account
- ~ Resorption-apposition processes run simultaneously both inside the socket and outside the alveolar process, corpus tooth transfer

Resorption-apposition processes run inside the socket, corpus tooth transfer

~ Resorption-apposition processes run inside the socket, the tooth is transferred gradually – inclining}

Kingsley-Walkgof's theory took into consideration:

{=Bony tissue elasticity

- ~ Apposition
- ~Resorption
- ~ Apposition, resorption
- ~ Apposition, resorption, bony tissue elasticity}

Flurence's theory describe the next processes during orthodontic tooth movement:

{=The bone apposition and resorption in two opposite parts of alveolus

- ~ The periodontal soft tissues remodeling
- ~ The apposition and resorption in two opposite parts of root
- ~ No correct answer

~ The bone apposition}

The Oppenheim's theory describe the next processes during orthodontic tooth movement:

{= The bony tissue rearrangement due to teeth movement (apposition and resorption)

- ~The bone movement together with teeth the due to bone elasticity
- ~ The changes in spongy tissue provide the teeth movement together with the alveolus
- ~ The periodontal soft tissues remodeling
- ~No correct answer}

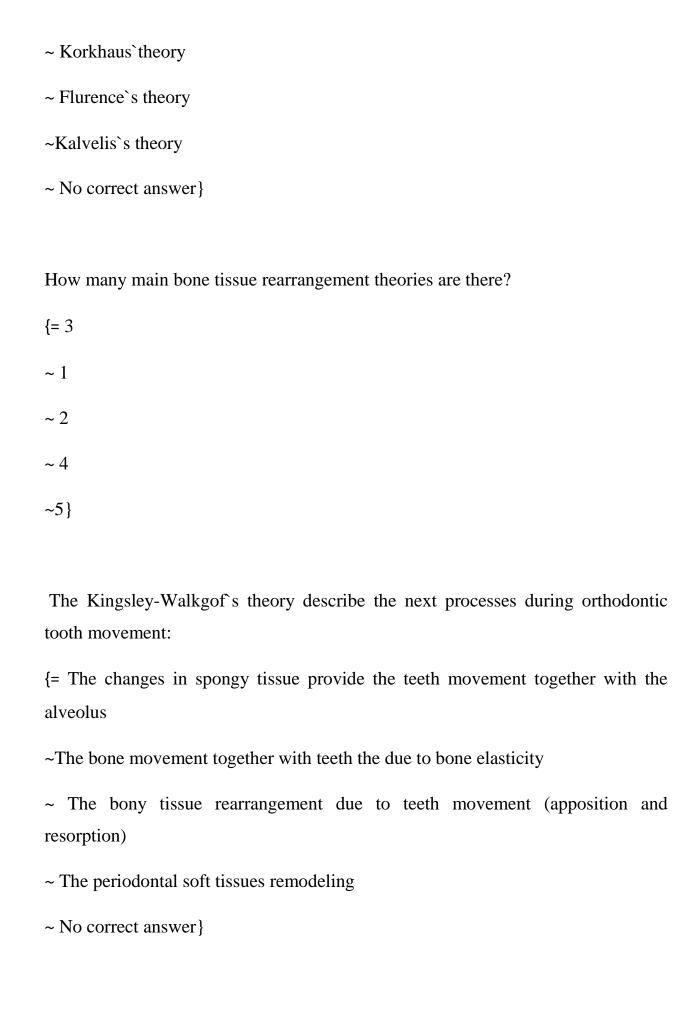
The scientists who studied the influence of orthodontic appliances on periodontal tissues are:

{= Oppenheim, Kalvelis, Kingslay

- ~ Korkhaus, Flurence, Hotz
- ~ Raisman, Herbst
- ~ Oppenheim, Pont, Kalvelis
- ~ All correct answer}

Due to which theory teeth transfer together with the alveolus, the bone is elastic and change it's configuration?

{= Kingsley and Walkgof's theory



Due to which theory it is bony tissue rearrangement owing to the process of apposition and resorption?

```
{= Oppenheim`s theory
```

- ~ Korkhaus`theory
- ~ Flurence`s theory
- ~ Simon`s theory
- ~No correct answer}

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- ~ In the pulp of the tooth
- ~ In the joint, the muscles
- ~ In the periodontium, the hard tissues of the tooth}

What does dispensary system provide?

{= Early detection, treatment and prevention of diseases

- ~ Prevention of diseases
- ~ Treatment of diseases
- ~ Organization of systemic observation of patient
- ~No correct answer}

During intra-oral examination of the 9-year-old boy it was revealed that relationship of the first permanent molars is Angle class I. He has correct lip closure, no abnormal functions. To what dispensary group should we refer such patient?

```
{= First group
```

- ~ Fourth group
- ~ Second group
  - ~Third group
- ~ Fifth group}

From how many stages health examination consists of?

{= Five stages

- ~ Four stages
- ~ Six stages
- ~ Three stages
- ~ No correct answer}

What measures the first stage of health examination include?

{= Registration of all children

- ~ Distribution children into groups
- ~Specialized examination of every child
- ~ Studying the effectiveness of orthodontic health examination
- ~ All correct answer}

The parents of the 12-year-old girl came to the dentist for the consultation.

During examination a doctor revealed that the upper permanent canines

are located above the occlusal plane. How we call such position of the teeth and to what dispensary group should we refer the patient?

- {= Supra position, third group
- ~Infra position, third group
- ~Transposition, second group
- ~ Mesial position, second group
- ~Supra position, second group}

A 9-year-old girl has correct lip closure, no abnormal functions, and normal occlusion. To what dispensary group should we refer the patient?

{=First group

- ~ Fourth group
- ~ Second group
  - ~ Third group
- ~Fifth group}

The fourth dispensary group includes children with?

{=Evident changes in the dento-alveolar apparatus

- ~ Correct lip closure, no abnormal functions, and normal occlusion
- ~ Risk factors
- ~ Not severe malocclusions, caused by functional changes
- ~ All correct answer}

A 13-year-old girl has a V-shaped upper dental arch. Orthodontists found out from the anamnesis that the patient had mouth breathing. What shape of the upper dental arch should be in the norm? To what dispensary group should we refer the patient?

```
{= Ellipse, third group
    ~ Half-round, second group
    ~Parabola, second group
    ~ Saddle like, third group
    ~ Half-round, third group}
```

Children of what dispensary group needs specialized help and complex treatment?

```
{= Fourth group
    ~ First group
    ~Second group
    ~ Third group
    ~Fifth group}
```

In a 13-year-old girl was revealed: 34 tooth is rotated in relation to the lingual-vestibular direction on 30 degrees. Define, what keys of normal occlusion by Andrews is changed? To what dispensary group should we refer the patient?

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{= 4<sup>th</sup>, third group
~ 5<sup>th</sup>, third group
~3<sup>rd</sup>, third group
~ 3<sup>rd</sup>, second group
~ 3<sup>rd</sup> and 4<sup>th</sup>, third group}
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The parents of the 11-year-old boy came to the dentist for the consultation. During examination a doctor revealed that the upper permanent canines are located below the occlusal plane. How we call such position of the teeth and to what dispensary group should we refer the patient?

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{= Infra position, third group
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- ~Supra position, third group
- ~ Transposition, second group
- ~ Mesial position, second group
- ~Supra position, second group}

What measures the third stage of health examination include?

- {= Distribution children into groups
- ~ Registration of all children
- ~ Specialized examination of every child
- ~Studying the effectiveness of orthodontic health examination
- ~ Conducting lessons of hygiene}

During the preventive examination of a 12-year-old boy it was determined a half-open mouth, lips closed with tension. Permanent dentition. An overjet is of 1.5 mm, it is normal relationship of canines and the first permanent molars. To what dispensary group should we refer such patient?

{=Second group

- ~ Fourth group
- ~ First group
- ~ Third group
- ~Fifth group}

Why should a child be fed with breast milk?

{= All correct answer

- ~ A child gets immunoglobulins with mother`s milk
- ~ This stimulates jaws growth
- ~ This provides the normal development of a child

~ This provides jaws position normalization}
The 1 <sup>st</sup> dispensary group includes children:
{= Practically healthy children
~ With violated speech function
~ With pernicious habits
~With infantile type of swallowing
~ With a shortened tongue frenulum}
The 2 <sup>nd</sup> dispensary group includes children:
{=With functional disorders of breathing, swallowing, speech, mastication,
mimicry; with pernicious habits, shallow vestibule of mouth
~ Healthy children
~ With not full-blown morphologic changes and anomalies of teeth position
~With full-blown morphologic changes and anomalies of teeth position
~ With congenital pathology}
How many dispensary groups are singled out?
{= 4
~3
~2
~ 5
~ 6}
In what periods of occlusion are preventive measures taken?
{= All periods
~ Milk
~ Mixed

- ~ Permanent
- ~ Preventive is not needed}

Who offered the system of exercises for the prevention and treatment of maxillofacial deformities?

- {= Rogers
- ~Hotz
- ~ Frankel
- ~ Angle
- ~ Andresen}

In the period of milk dentition general prevention comes to:

- {= All correct answer
- ~ Prevention of bad habits
- ~ Rickets prevention
- ~ Oral cavity sanation
- ~Somatic diseases prevention}

To organize the preventive work dentist should:

- {= Examine the children in kinder gardens and schools
- ~ Treat the children with malocclusion
- ~ Examine the children who come to the clinic with complains
- ~ Examine the children in schools
- ~ No correct answer}

With what other doctors the orthodontist should do preventive work?

{= With pediatrician, otolaryngologist, hygienist

~ With surgeon, hygienist ~ Only himself ~ With cardiologist ~ With pediatrician, otolaryngologist, hygienist, cardiologist} Where should orthodontist organize the educational work? {= In kinder gardens and schools ~ The orthodontist shouldn't do this ~ In clinic ~ In schools ~ All correct answers} In which periods of development the orthodontist can do the prevention of malocclusion? {= From antenatal period during the whole life ~ During primary and mixed dentition stages ~ From 6 month till the end of growth ~ From antenatal period till 12 years ~ No correct answer} What preventive measures can dentist do if patient is 42 years-old? {= Keep the whole oral cavity in good state ~ Treat the periodontal diseases

~ Use the myogymnastic

- ~ Nothing
- ~ No correct answer}

To provide the proper treatment and prophylactic measures there is:

- {= Dispensary system
- ~ Orthodontic treatment
- ~ Psychological prophylactic measures
- ~ Sanation
- ~ No correct answer}

How school-dentist can provide the malocclusion prevention?

- {= To educate the children about malocclusion prevention
- ~ To treat the malocclusion
- ~ To prescribe the myogymnastic exercises
- ~ To send the children to orthodontic clinic
- ~ No correct answer}

The 7-years-old girl has infantile type of swallowing. Molars are in I class correlation, overbite is normal, overjet is 1,5mm. What should school-dentist do and to which dispensary group should dentist register her?

- {= Prescribe myogimnastic, II dispensary group
- ~ Use preventive measures, IV dispensary group
- ~ Do nothing, I dispensary group

- ~ Prescribe orthodontic appliance, III dispensary group
- ~ Prescribe myogimnastic, IV dispensary group}

A 13-years-old boy has I class molars correlation, lower 1/3 of face is equal to middle 1/3, profile is straight. To which dispensary group should dentist register him?

- {= First dispensary group
- ~ Third dispensary group
- ~ Second dispensary group
- ~ Forth dispensary group
- ~ Fifth dispensary group}

A 10-years old boy has mouth breathing and open lips. Face and profile are normal. During clinical examination dentist diagnosed malocclusion in vertical plane (open bite 1 mm), crowding. What should school-dentist do and to which dispensary group should dentist register him?

- {= Send him to orthodontist, III dispensary group
- ~ Treat the child himself, II dispensary group
- ~ Send him to orthodontist, II dispensary group
- ~ Prescribe myogimnastic, IV dispensary group
- ~ Prescribe myogimnastic, II dispensary group}

A 12-years old child has space between upper and lower lips. The space between incisors is 2mm. Upper incisors are protruded. With what other doctors the orthodontist should do preventive work or treatment?

- {= With pediatrician, otolaryngologist
- ~ With surgeon
- ~ Only himself
- ~ With hygienist
- ~ With pediatrician, otolaryngologist, hygienist, cardiologist}

Who should find out the risk factors in pupils at school?

- {= School-dentist during preventive examination
- ~ Orthodontist during preventive examination once a year
- ~ Parents
- ~ Teachers
- ~ Nurses}

What is the active form of the sanitary education?

- {= Lectures
- ~ Posters
- ~ Films
- ~ Articles
- ~ All of the above}

What is the most optimal work with parents during sanitary education of children?

- {= Dentist must discuss with parents before paternal meeting
- ~ Any work with parents
- ~ Parents must be present on the children's health lesson
- ~ Parents must be informated about children's health lesson

~ Dentist must discuss with parents after health lesson}