CDAMP Module IV 5th edition book

***VOCABULARY WORKSHEET***

# Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ #\_\_\_\_\_\_\_\_

Directions: Using Delmar’s “Dental Assisting, a Comprehensive Approach”, **5th Edition,** by Phinney & Halstead, **2017,** Chapters 21, 22, & 23, define the following terms:

**SECTION 1 – INTRODUCTION TO DENTAL RADIOGRAPHY, Chapt. 21**

Wilhelm Conrad Roentgen –

Radiology-

Radiographs-

Roentgen-

Fluorescence-

Dr. C. Edmond Kells-

Dr. William Rollins -

Dr. William D. Coolidge-

Dr. Howard Rober-

Frank McCormack-

Position indicator device (PID)

Electromagnetic energy-

Wavelength-

 short-

 long-

Ionization-

Primary radiation-

Aluminum filter-

American National Standards Institute-

Anode-

Atom-

Basal cells-

Bremsstrahlung radiation-

Digital imaging-

Dosimeter-

Electrons-

Emulsion-

### Secondary radiation-

Scatter radiation-

Leakage radiation –

Halide crystals-

Hard radiation-

Inherent filter-

Intensity-

Kinetic energy-

Latent image-

Lead apron-

Leakage radiation-

Neutrons-

Protons-

Radiation monitoring device-

Radiolucent-

Radiosensitive-

Scatter radiation-

Soft radiation-

Transformers-

Tubehead-

Tungsten target-

X-rays-

***CDAMP Module IV Vocabulary***

***INTRODUCTION TO DENTAL RADIOGRAPHY – 2***

Radiation units of measurement

 R-

 Rad/GY-

 Rem/Sv-

 mr-

 rbe-

 c/kg-

Mitosis -

Somatic cells-

Genetic cells-

## Somatic effect-

Genetic effect-

Cell radiosensitivity-

ALARA –

Maximum permissible dose (MPD)-

Secondary radiation-

Cummulative/ long-term effect –

Latent period -

CDAMP Module IV Vocabulary

***INTRODUCTION TO DENTAL RADIOGRAPHY – 3***

#### Control panel-

### Milliamperage (mA)-

Kilovoltage (kV)-

Electronic timer-

Milliamperage seconds –

Contrast –

Density –

X-ray tube - -

Focusing cup-

Focal spot-

Central beam-

Collimator/lead diaphragm-

Responsibility for safety-

 manufacturer-

 dentist-

CDAMP Module IV Vocabulary

***INTRODUCTION TO DENTAL RADIOGRAPHY – 4***

 dental assistant-

 patient-

List additional ways to reduce radiation exposure-

Thermionic emission -

Explain how energy is generated and radiation is produced in the tube head of the x-ray machine-

Composition of dental x-ray film-

a.

b.

c.

d.

Film speeds-

Film sizes-

1. No. 0-
2. No. 1-
3. No. 2-
4. No. 3-
5. No. 4-

CDAMP Module IV Vocabulary

***INTRODUCTION TO DENTAL RADIOGRAPHY – 5-***

Parts and purposes of a dental film packet-

a.

b.

c.

d.

### Storage of dental film-

CDAMP Module IV Vocabulary SECTION – 2 RADIOGRAPH PRODUCTION, Chapter 22

Quality radiograph -

Infection control & safety protocol-

 barriers-

 personal protective equipment (PPE)-

 lead apron-

 paper cup-

 disinfectant spray-

 autoclaving-

What items should be removed from patient before radiographs are taken?

 Why?

Control of active gag reflex-

### Periapical radiograph-

Bite-wing radiograph-

Occlusal radiograph-

Bisecting technique-

 disadvantages-

CDAMP Module IV Vocabulary

RADIOGRAPH PRODUCTION -2-

Paralleling technique-

Vertical angulation-

Horizontal angulation-

Film holder devices-

Film positioning-

 maxillary incisors (centered at)-

 maxillary cuspid shot (centered at)-

 maxillary premolar shot (centered at)-

 maxillary molar shot (centered at)-

 mandibular incisors shot (centered at)-

 mandibular cuspid shot (centered at)-

 mandibular premolar shot (centered at)-

 mandibular molar shot (centered at)-

 premolar bite-wing shot (centered at)-

 molar bite-wing shot (centered at)-

Full-mouth radiographic series –

Bite-wing series -

CDAMP Module IV Vocabulary

RADIOGRAPH PRODUCTION -3-

Topographic technique for occlusal radiographs-

 maxillary view-

 mandibular view-

Cross-section technique-

 maxillary view-

 mandibular view-

Pediatric radiographs, special concerns-

Edentulous radiographic survey, special concerns-

### Endodontic radiographic technique, special concerns-

Taking x-rays on special needs and compromised patients, special concerns-

Darkroom set up-

Safelight-

CDAMP Module IV Vocabulary

RADIOGRAPH PRODUCTION -4-

 Solutions

 temperature –

 replenishing -

Manual processing tanks & cover-

Water thermometer-

Stirring rods-

Timer-

Film hangers/ processing racks-

Dental x-ray dryer-

### Developer solution-

 hydroquinone-

 elon-

 sodium carbonate-

 sodium sulfite-

 potassium bromide-

Fixer solution-

CDAMP Module IV Vocabulary

***RADIOGRAPH PRODUCTION -5***

 sodium thiosulfate-

 acetic acid-

 potassium alum-

Staining-

Water bath-

OSHA Guidelines for disposing developer & fixer-

Procedure steps for manual processing – (18)

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 CDAMP Module IV Vocabulary

RADIOGRAPH PRODUCTION -6-

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Automatic processor-

Automatic processing solutions-

Procedure steps – (9)

Care of the automatic processor-

CDAMP Module IV Vocabulary

**SECTION -2 RADIOGRAPH EVALUATION & MOUNTING**

 **Chapter 22, & Chapter 23, pg. 488 – 493**

Common radiographic errors:

Distortion-

Elongation-

Foreshortening-

Overlapping-

Cone cutting-

Clear film-

Double exposure-

Blurred image-

Underexposed film-

Overexposed film-

Radiopaque film images-

### Herringbone pattern-

CDAMP Module IV Vocabulary

### **RADIOGRAPH EVALUATION & MOUNTING -2-**

### Light film image-

### Dark film image-

Fogged film-

Partial image-

Film artifacts-

Torn or scratched film-

Air bubbles-

Reticulation-

Central ray-

Angulation-

Curve of spee

Developer solution-

Fixer solution-

Interproximal-

Intersecting lines-

Long axis of the tooth-

Manual processing-

Oxidation-

Parallel lines-

Partial image-

Perpendicular lines-

Quality assurance-

Quality control test-

Replenish-

Right angle-

Step wedge-

Topographic technique-

Viewbox-

Streaks-

Duplication of radiographs –

Anatomical landmarks –

Radiopacity –

Radiolucency -

##### Mandibular landmarks

 mental foramen-

CDAMP Module IV Vocabulary

### **RADIOGRAPH EVALUATION & MOUNTING -3-**

 external oblique ridge-

 trabecular patterns-

 alveolar crest-

 retromolar area-

 mandibular foramen-

 condyle-

 coronoid process-

 border of the mandible-

 symphysis-

##### Maxillary landmarks

###  hard palate-

 nasal septum-

 nasal cavities-

 maxillary sinuses-

 orbit-

 maxillary tuberosity-

Artifacts & conditions shown on radiographs -

CDAMP Module IV Vocabulary

### **RADIOGRAPH EVALUATION & MOUNTING -4-**

Raised/convex dot on radiograph-

### Labial mounting-

Lingual mounting-

X-ray view box-

Film mount styles & sizes-

Storage of patient radiographs-

Legal implications-

 CDAMP Module IV Vocabulary

**SECTION -3 EXTRAORAL & DIGITAL RADIOGRAPHY**

 **Chapt. 23**

Extraoral radiographs-

 Panoramic radiography –

Tomography –

Rotational centers –

Focal trough –

Panoramic unit –

Cassette film holder -

Intensifying screens –

Rare earth phosphors -

Panoramic exposure

 lead apron -

 patient positioning -

 explaining procedure to patient -

 exposure technique -

Ghost image –

Bite block –

CDAMP Module IV Vocabulary

**EXTRAORAL & DIGITAL RADIOGRAPHY -2-**

Midsaggital plane -

Frankfort plane –

Tongue position –

Cephalometric radiograph –

Lateral jaw radiograph –

Transcranial temporomandibular joint radiograph –

Anatomical landmarks –

Radiopaque structures –

Radiolucent structures –

Superimposition -

CT scan (computed tomography) –

MRI (magnetic resonance imaging) –

Digital radiography –

Fundamental concepts of digital radiography –

CDAMP Module IV Vocabulary

**EXTRAORAL & DIGITAL RADIOGRAPHY -3-**

Analog image –

Digital imaging –

 direct –

 indirect –

 storage phosphor imaging –

Pixels (picture elements) –

Gray scale –

Digital x-ray machine –

Sensor (image detector) –

Charge-coupled device (CCD) –

Computer –

Software –

Advantages of digital radiography –

Disadvantages of digital radiography -

CDAMP Module IV Vocabulary

**EXTRAORAL & DIGITAL RADIOGRAPHY -4-**

Preparation of equipment –

Preparation of patient –

Taking exposure –

 Direct imaging –

Indirect imaging –

After exposure –

3-Dimensional Imaging in dentistry –

 uses –

 benefits –

 patient preparation –

Hand-held Intraoral Radiography –

Axial plane-

Cassette-

Cephalostat-

Complementary metal oxide semiconductor-

Digital subtraction-

Extraoral imaging-

Focal trough-

Ghost image-

Handheld intraoral radiography-

Intensifying screen

Lead apron artifact-

Photostimulable phosphors-

Radiolucency-

Rare earth phosphors-

Rotational centers-

Storage phosphor imaging-

Tragus of the ear-

Trismus-