A photograph of a reindeer with large, velvet-covered antlers in a natural setting. The reindeer is shown in profile, facing right, with its head slightly lowered. The antlers are large and have a soft, pinkish-brown velvet covering. The background is a lush green field with some trees and bushes. The overall scene is bright and natural.

Atraumatic Restorative Treatment



Alaska Native Tribal Health Consortium
Department of Oral Health Promotion

Atraumatic Restorative Treatment ART

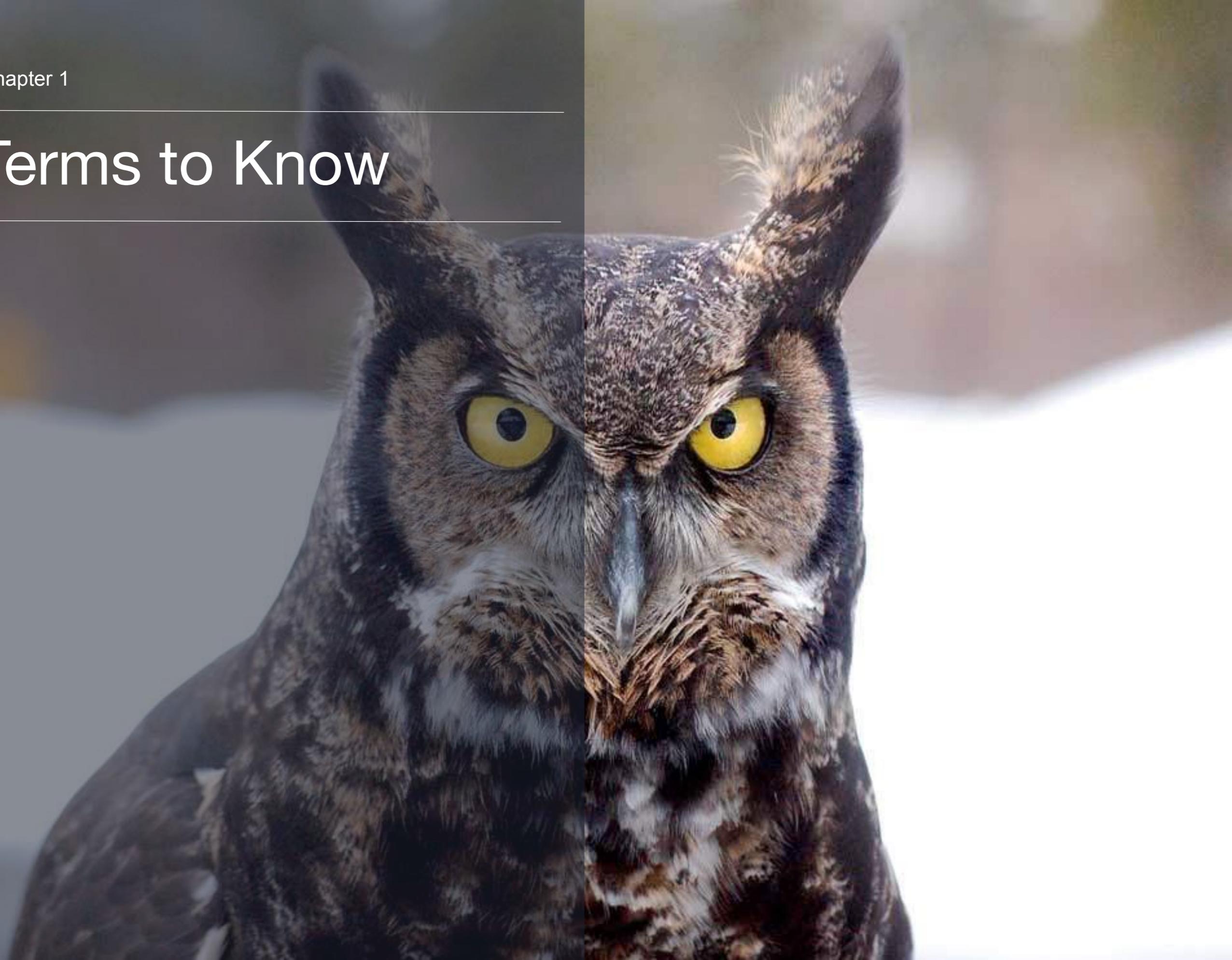
To prepare the Alaska Dental Health Aide to treat dental disease, the following presentations are in the ART Book.

- Terms to Know
- Prepare and Set Up
- Atraumatic Restorative Treatment (ART)
- ART Without Electricity
- ART With Electricity
- ART Multiple Surfaces
- Review
- Documentation and Recall



Chapter 1

Terms to Know





Terms to Know

Notes



Articulating paper:

Made of a thin, non-adhesive paper strip covered in fluorescent ink or dye-containing wax. It is used to mark the areas on the teeth where the teeth contact during biting and grinding.



Atraumatic Restorative Treatment (ART): Technique that involves removal of caries using only hand instruments and no anesthetic, and the placement of glass ionomer to restore a tooth.



Bite:

The way the upper (maxillary) and lower (mandibular) teeth come in contact during chewing or at rest. The dental term is occlusion.



Cavitation:

Hole in a tooth.



Cleoid-Discoid:

Instrument used to remove excess filling material, and shape a restoration.



Contraindications:

To make inadvisable, not recommended.



Cotton pliers:

Instrument used to hold articulating paper.



Dental caries:

Known as tooth decay or cavities.



Dental hatchet:

Instrument used to open a cavity or break off very weak unsupported enamel.

Terms to Know



Notes



Dentin:

Issue that is calcified and consists of tiny tubules or tubes. It is the second layer of a tooth and is normally covered by enamel and covers the pulp.



Dentino-Enamel Junction (DEJ): An area where the enamel (covers the crown of a tooth) meets the dentin (the inner part of the tooth covering the pulp).



Desiccate:

Drying a tooth to where all the moisture is removed.



Excavating:

Removing caries from a tooth to prepare a tooth for a restoration.



Extrude:

Force out or discharge



Fluoride:

Strengthens and protects teeth from tooth decay.



Glass ionomer:

Dental material that chemically bonds to enamel and dentin, releasing fluoride over time; used in ART.



Indications:

To make advisable, recommended.



Occlusion:

The way the maxillary (upper) and mandibular (lower) teeth come together during chewing or at rest.

Terms to Know



Notes



Probe:

Instrument used to determine the softness of the dentin.



Pulp:

Area of connective tissue, blood vessels, and nerves located in a chamber within the dentin layer of a tooth. It is found in the crown and the root of a tooth.



Pulp exposure:

Bleeding or the appearance of a dark hole in the tooth where the pulp chamber is located. There may be the smell of dead tissue, and the tooth becomes sensitive.



Smear layer:

A thin yet tenacious coating of tooth debris that appears after dental instrumentation. It prevents adequate bonding of glass ionomer to tooth structures. It is not easily rinsed away, and must be removed by acid etching.



Spoon excavator:

Instrument used to remove plaque and debris from the tooth.



Triturate:

The process of mechanically mixing restorative dental materials like glass ionomer or amalgam.



Triturator:

Dental device that is used to mix dental materials like amalgam and glass ionomer.

Terms to Know



Notes

Word Search 1.1 Click Help Button for Instructions

00:00:19 You have 848 points Help Restart +A -A

D	J	N	O	I	T	A	T	I	V	A	C	V	T	P
D	I	X	A	W	G	E	T	A	R	U	T	I	R	T
E	M	F	A	C	D	F	P	A	P	Y	Y	O	Y	H
N	L	A	J	X	I	T	M	L	Y	N	B	I	M	L
T	S	S	O	G	U	B	U	Y	I	E	C	I	O	M
A	M	L	T	Y	V	P	S	A	C	P	T	I	C	O
L	E	N	O	I	S	U	L	C	C	O	K	N	Y	P
H	A	M	S	R	E	I	L	P	N	O	T	T	O	C
A	R	S	Y	I	O	E	T	A	C	C	I	S	E	D
T	L	H	R	O	T	A	R	U	T	I	T	I	R	T
C	A	S	N	O	I	T	A	C	I	D	N	I	M	Y
H	Y	D	N	E	L	W	F	L	U	O	R	I	D	E
E	E	R	U	S	O	P	X	E	P	L	U	P	C	I
T	R	B	D	E	N	T	I	N	F	X	W	C	O	V
J	B	Z	J	P	C	E	T	I	B	G	U	V	V	V

- Bite-
- Dentin-
- Pulp-
- Occlusion-
- Probe-
- Triturator-
- Cavitation-
- Indications-
- Smear layer-
- Triturate-
- Desiccate-
- Fluoride-
- Dental hatchet-
- Pulp exposure-

Cotton pliers : Instrument used to hold articulating paper.

Prepare and Set Up



Prepare and Set Up

Click to open, slide right to view

Notes

Slider 2.1

My next patient is here.
I'll review the Medical History
and Treatment Plan first.



Prepare and Set Up

Click to open, slide right to view

Notes

Slider 2.2 ART Review Treatment Steps

Eddie is here for an ART restoration.
I'd better review.



Prepare and Set Up

Notes

Movie 2.1 ART Patient Preparation



Prepare and Set Up

Explaining the Procedure

Atraumatic Restorative Treatment (ART) involves the removal of caries using only hand instruments, no anesthetic, and the placement of glass ionomer to restore a tooth. ART is both a preventive approach and treatment for dental caries.

Frequently Asked Questions 2.1

FAQs

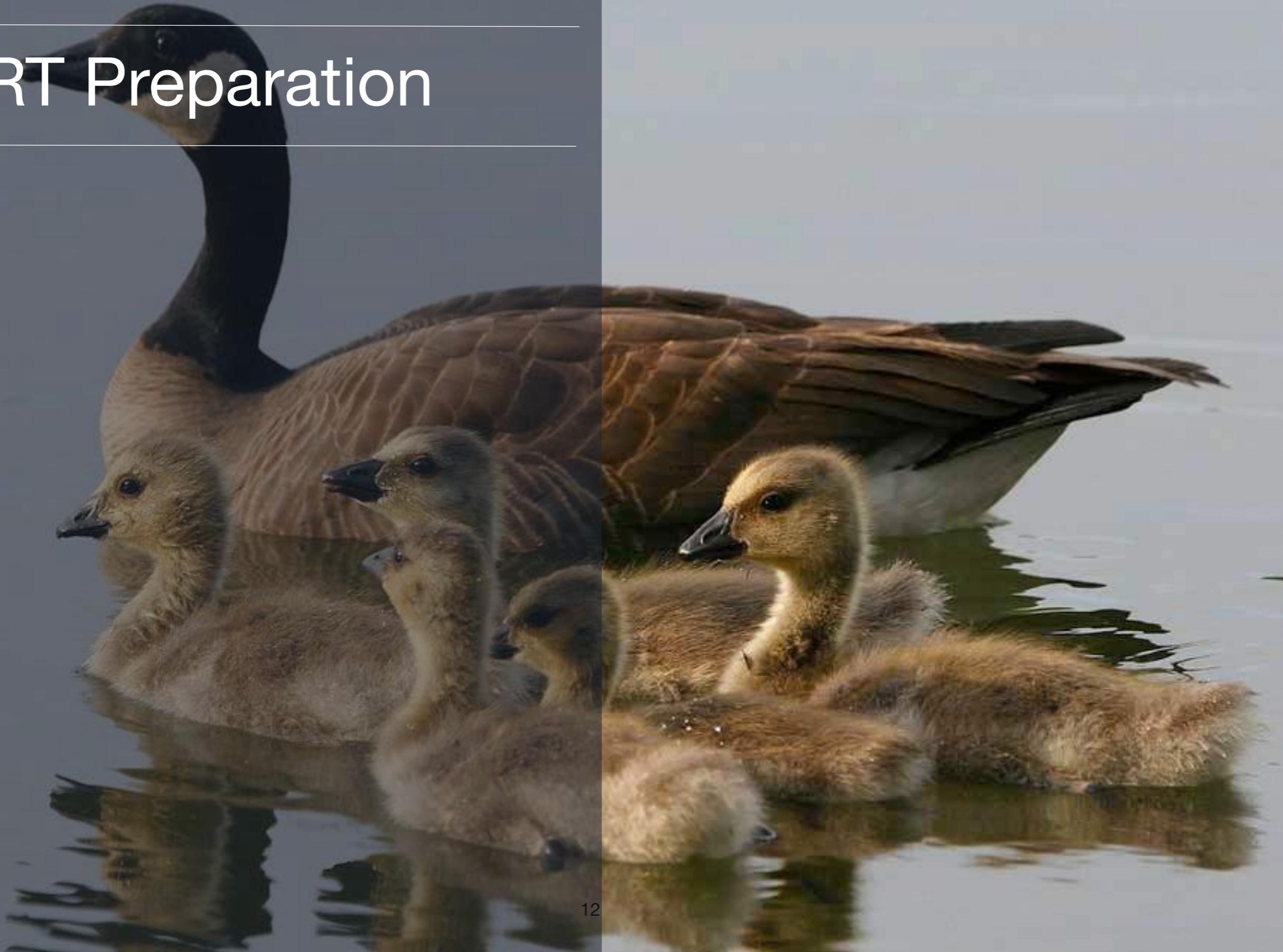
Notes



Movie 2.2 ART Procedure Overview



ART Preparation

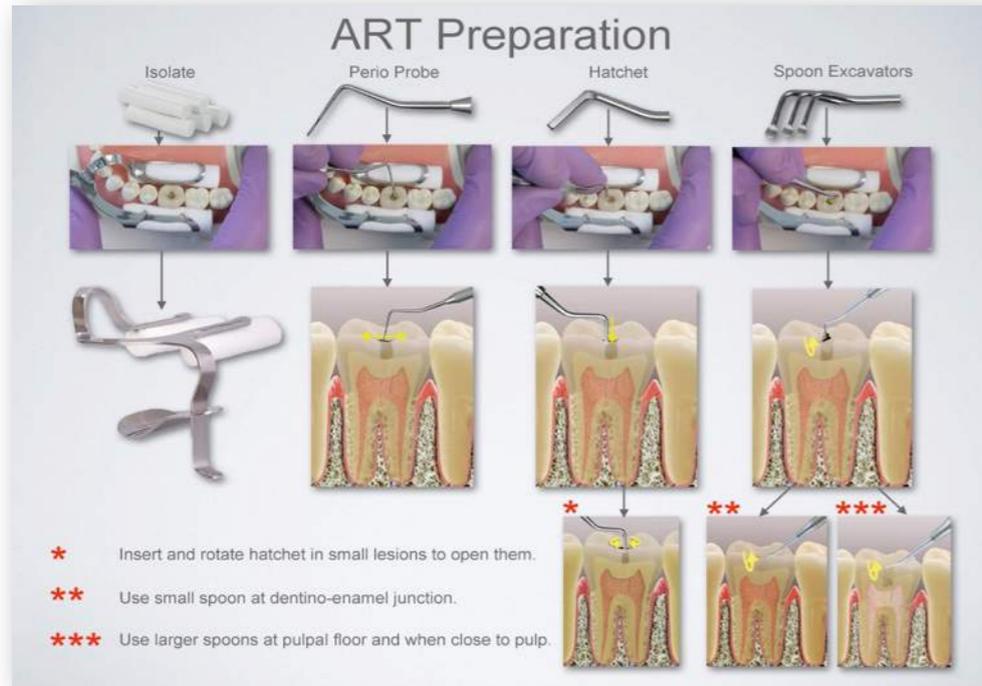


ART Preparation

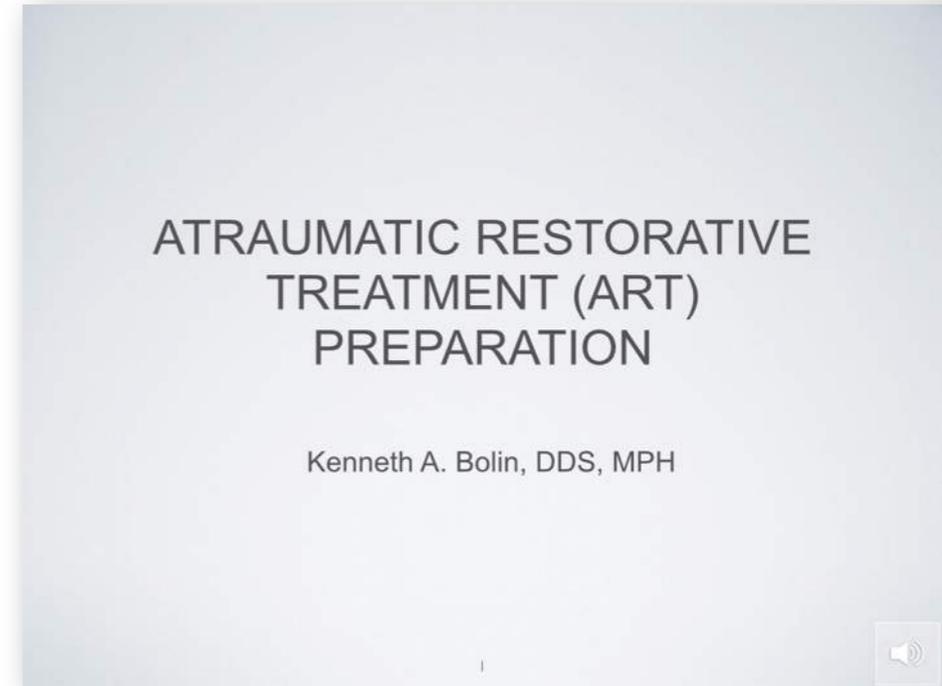


Notes

Field Guide 3.1



Presentation 3.1



Movie 3.1 ART Preparation Single Surface No Audio



Movie 3.2 ART Shallow Preparation



Movie 3.3 ART Deep Preparation



ART Preparation

Notes

Review 3.1 ART Instrument Names

MATCHING

ART Preparation

Notes

Review 3.2 ART Instrument Pictures

MATCHING

ART Preparation

Notes

Review 3.3 Indications / Contraindications 1

PROS & CONS

ART Preparation

Notes

Review 3.4 Indications / Contraindications 2

PROS & CONS

Restoration Without Electricity

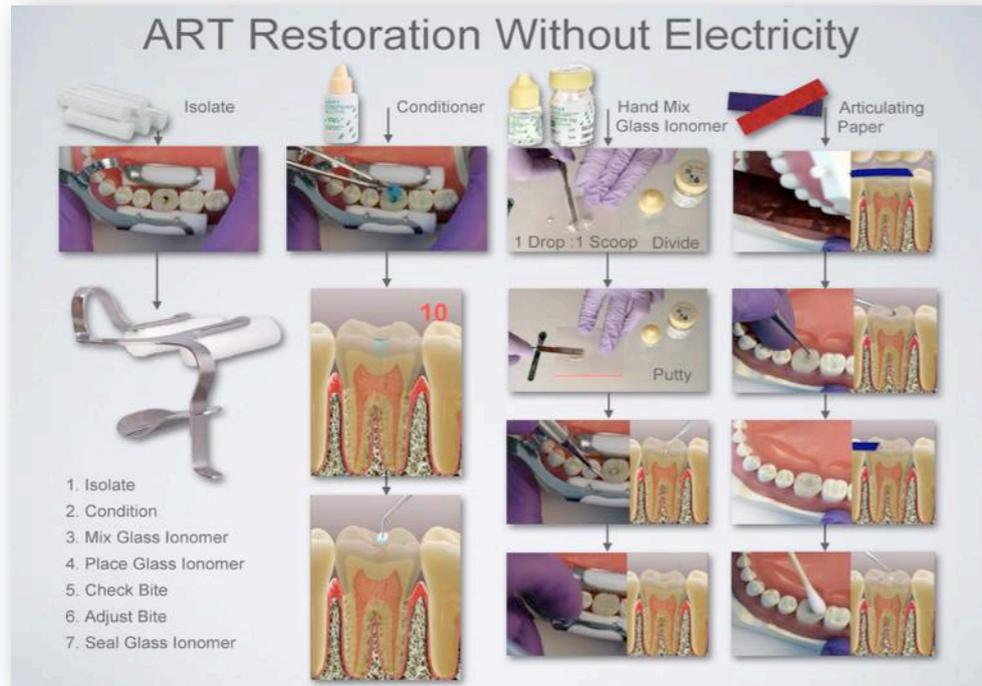


Restoration Without Electricity

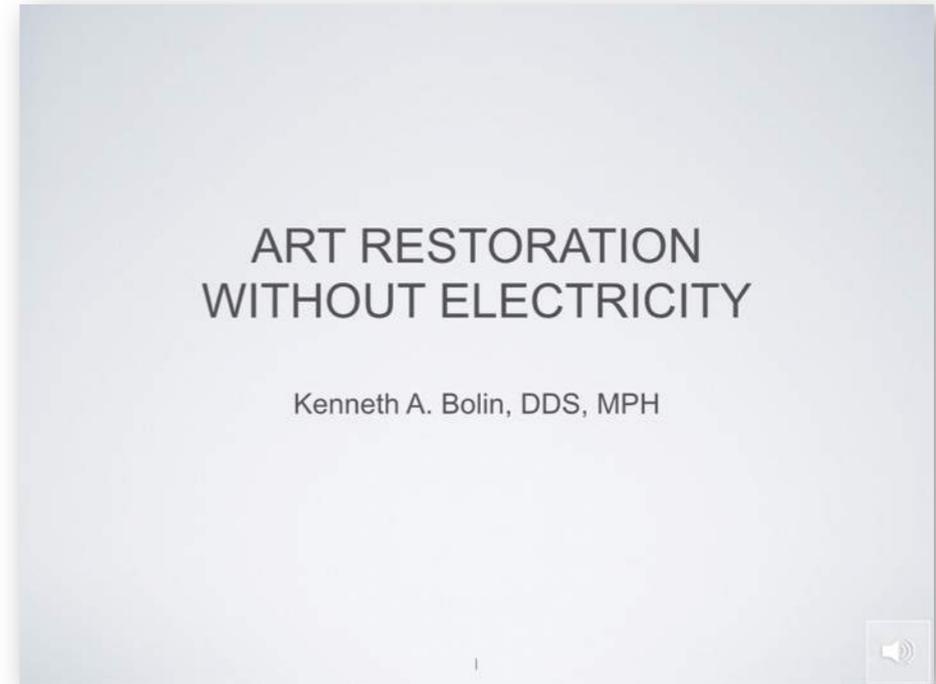


Notes

Field Guide 4.1



Presentation 4.1



Movie 4.1 Restoration Without Electricity No Audio



Movie 4.2 ART Shallow Restoration



Movie 4.3 ART Deep Restoration



Restoration Without Electricity

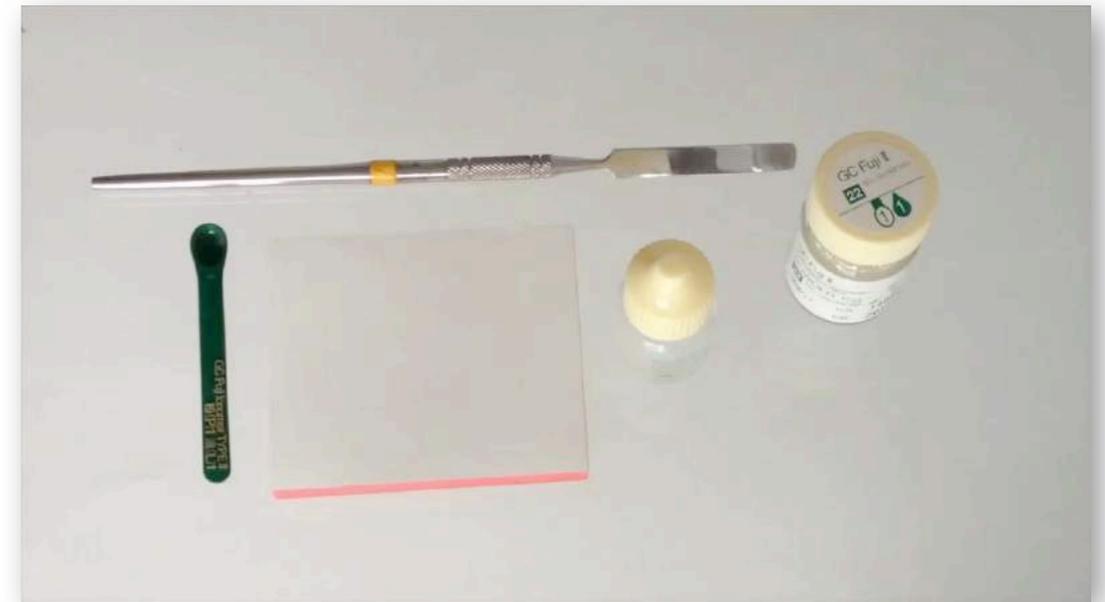
Field Guide 4.2

Hand Mix Glass Ionomer

- 1 Fuji II**
Glass ionomer hand mix.
- 2 Fuji II**
Powder to Liquid ratio 1:1 (1 scoop powder to 1 drop liquid).
- 3 Fluff the powder**
Lightly tap the bottle of powder against your hand.
- 4 Measure the powder**
Use the scoop provided in Step 1 level scoop.
- 5 1 drop of liquid**
Hold the bottle vertically and gently squeeze out 1 drop.
- 6 Divide the powder**
Using the spoon divide the powder into 2 equal parts.
- 7 Mix part 1**
Mix the first part for 10 seconds.
- 8 Mix part 2**
Mix the second part for 10 to 20 seconds.
- 9 Consistency**
Should be like putty, not too dry or wet.

Movie 4.4 Hand Mix Glass Ionomer

Notes



Field Guide 4.3

Glass Ionomer Working Time

Without Light

Minutes 0 1 2 3 4 5 6

Mixing 10 sec Working 1 min 40 sec Setting 2 min 30 sec Final Finishing

With Light

Minutes 0 1 2 3 4 5 6

Mixing 10 sec Working 20 to 40 sec Setting Final Finishing



Restoration Without Electricity

Notes

Review 4.1 ART Without Electricity

SEQUENCE

Restoration With Electricity



Restoration With Electricity



Notes

Field Guide 5.1

ART Restoration With Electricity

1. Isolate
2. Condition
3. Mix Glass Ionomer
4. Place Glass Ionomer
5. Light Cure Glass Ionomer
6. Check Bite
7. Adjust Bite
8. Seal Glass Ionomer

Presentation 5.1

ART RESTORATION WITH ELECTRICITY

Kenneth A. Bolin, DDS, MPH

Movie 5.1 ART Restoration With Electricity No Audio



Restoration With Electricity

Field Guide 5.3

Triturate Glass Ionomer

- 1 Triturate Glass Ionomer**
- 2 Remove From Packaging**
- 3 Loosen Powder**
Shake at 500-2 or 3 times on the counter.
- 4 Activate Capsule**
Push the plunger in until it is flush with the capsule.
- 5 Click once**
Place capsule into applicator and click once.
- 6 Mix Capsule**
Place into mixer and mix for 10 seconds at 4000 RPM.
- 7 Remove and Load**
Remove from mixer and load it into the applicator.
- 8 Click Twice**
Click the base twice and squeeze handle to introduce material.
- 9**

Movie 5.2 Triturate Glass Ionomer



Field Guide 5.2

Glass Ionomer Working Time

Without Light

Minutes 0 1 2 3 4 5 6

Mixing 10 sec Working 1 min 40 sec Setting 2 min 30 sec Final Finishing

With Light

Minutes 0 1 2 3 4 5 6

Mixing 10 sec Working 1 min 40 sec Setting 20 to 40 sec Final Finishing



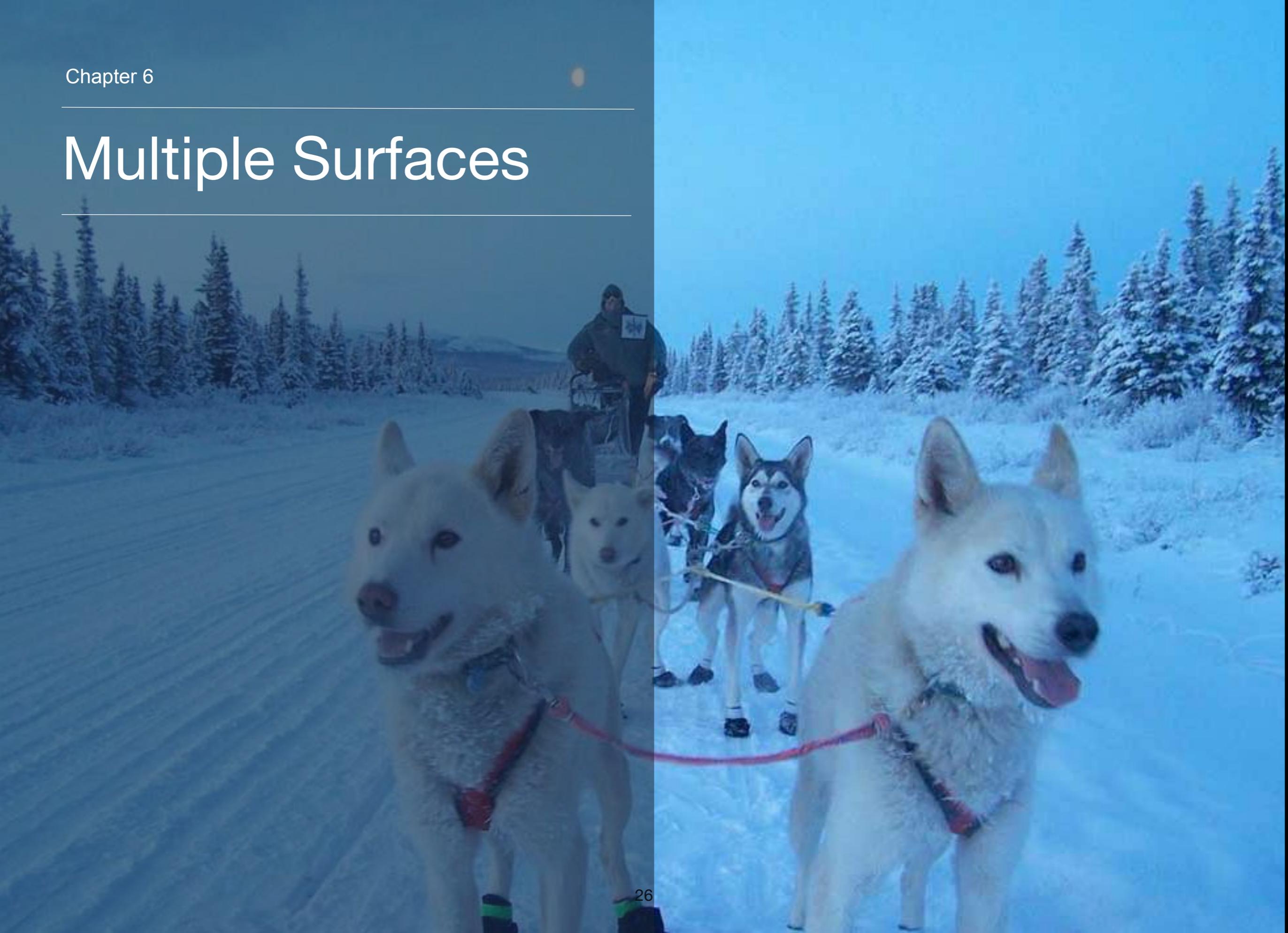
Restoration With Electricity

Notes

Review 5.1 ART WITH electricity

SEQUENCE

Multiple Surfaces

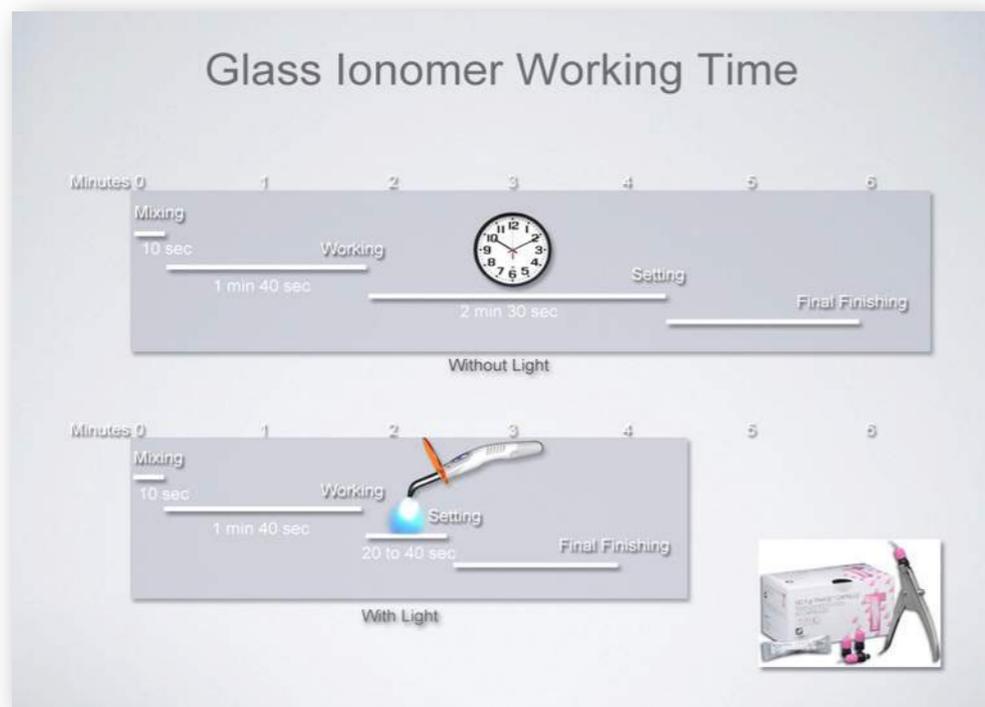


Multiple Surfaces

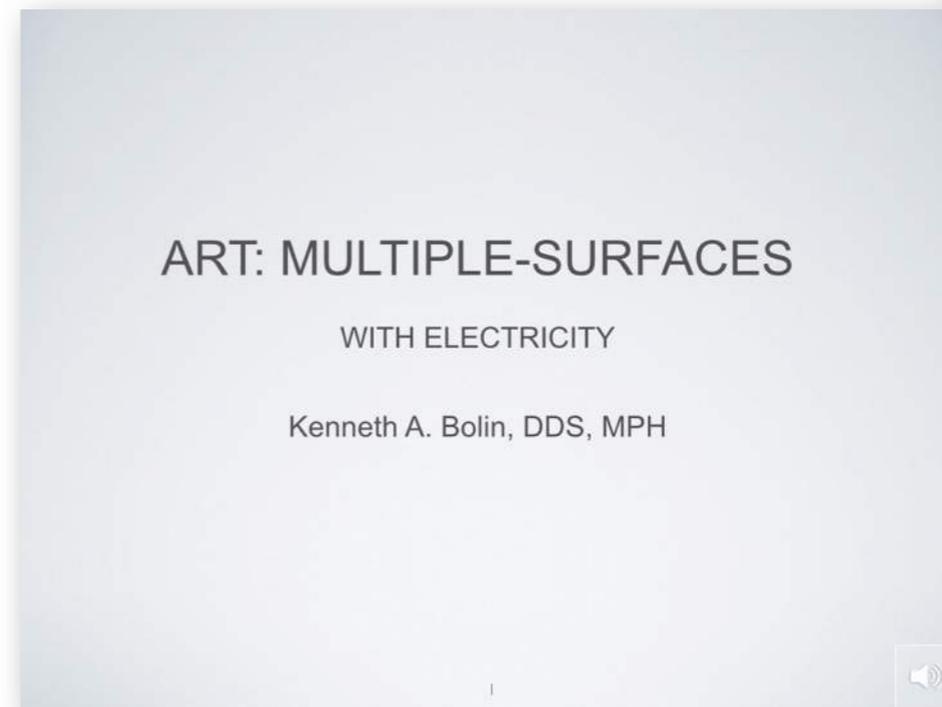


Notes

Field Guide 6.1



Presentation 6.1



Movie 6.1 ART Multiple Surfaces Preparation No Audio



Movie 6.2 ART Multiple Surfaces Restoration No Audio



Multiple Surfaces

Notes

Movie 6.3 ART Anterior Tooth



Multiple Surfaces

Notes

Review 6.1 Check the bite

SEQUENCE

Review

Review

Notes

Review 7.1 True or False

Question 1 of 20
ART is both a preventive and treatment approach to dental caries.

<input type="radio"/> T	<input type="radio"/> F
-------------------------	-------------------------

Review



Notes

Review 7.2 ART Walk Through



Documentation and Recall



Documentation and Recall

Documentation and Recall

Documentation is a summary of a dental appointment that includes the sequential order of the services and products used with the patient. The dental provider is responsible for ensuring that documentation is complete, clear, and accurate.

Documentation is written in a patient's chart or entered into the patient's electronic dental record at the end of each appointment. The documentation is in the SOAPE format:

S: Subjective Findings – Purpose of the patient's dental visit. When documenting what the patient said, use "quotation marks."

O: Objective Findings - Observations made by the dental provider.

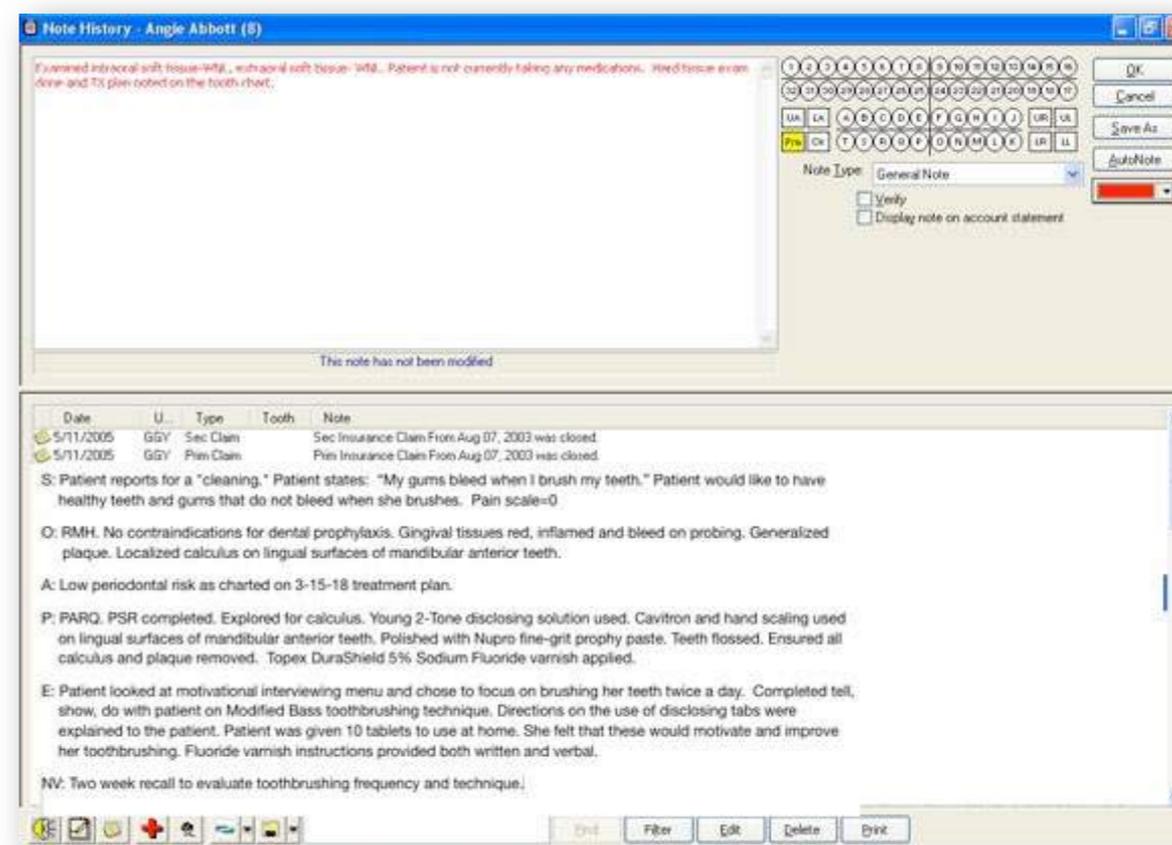
A: Assessment - Diagnosis of the patient's condition.

P: Plan - Planned, proposed and completed procedures.

E: Education - Information given to the patient regarding oral health.

Documentation also includes information about the patient's next visit:

NV: Next Visit -Time frame and treatment proposed for next appointment.



Documentation and Recall

Notes

S: Revisit for ART. Patient states he gets food caught in the hole in his tooth. Pain Scale = 0.

O: RMH. No significant findings or changes noted.

#A: O cavitation with soft brown dentin exposed.

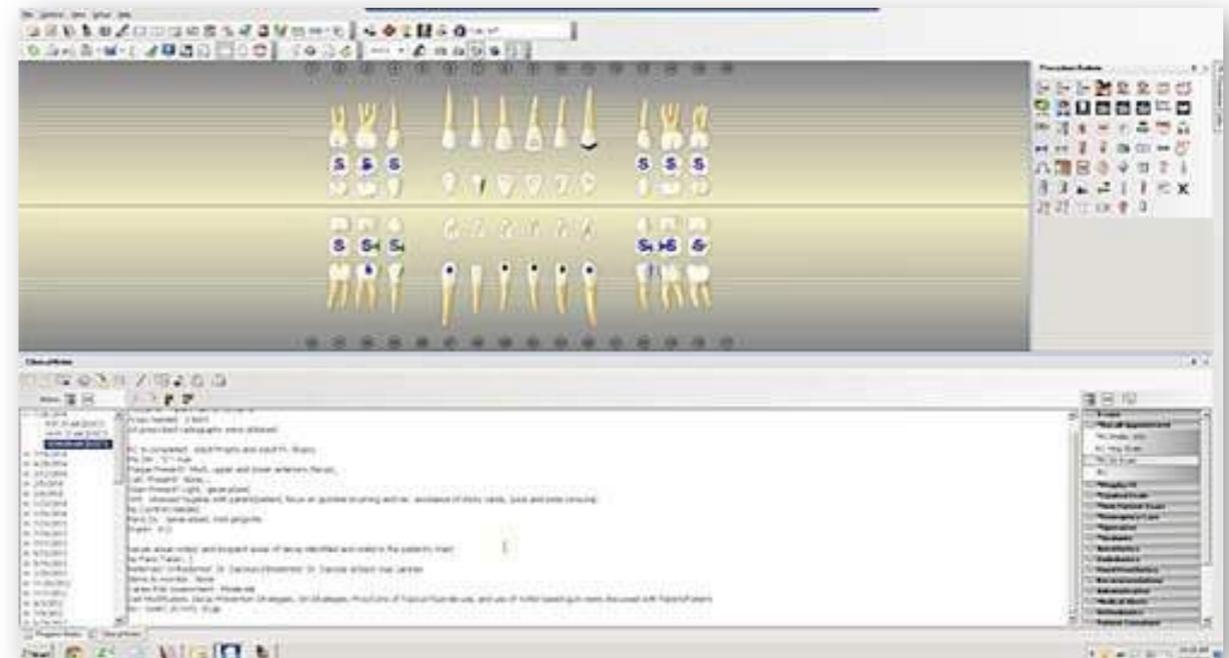
#B: DO cavitation with soft brown dentin exposed

A: #A-O, #B-DO caries charted on 3-5-15 treatment plan.

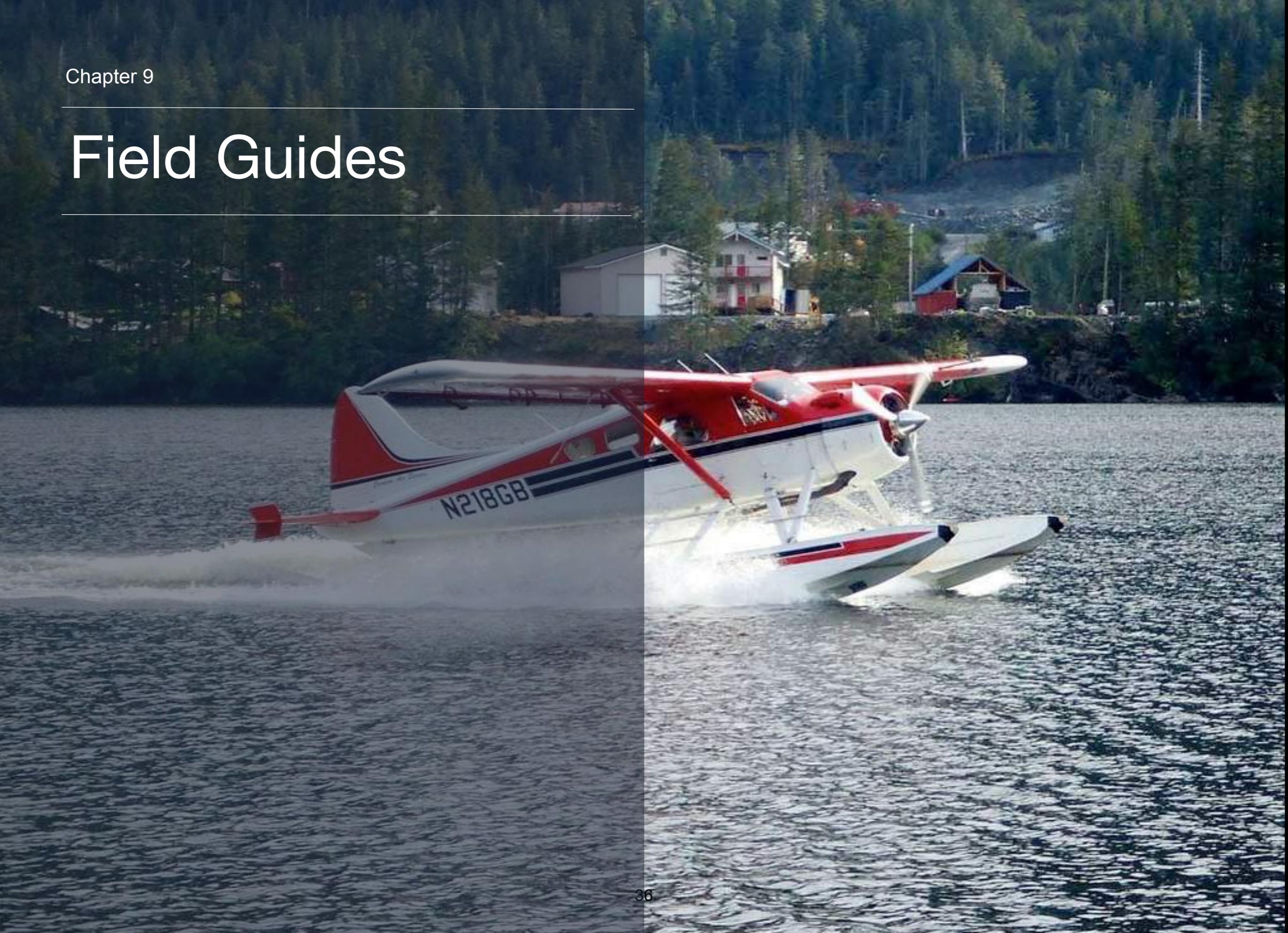
P: PARQ with parent and patient. Cotton roll isolation. #A-O, #B-DO: partial caries removal, Fuji cavity conditioner, Fuji Triage Pink, occlusion checked and adjusted, Fuji Coat LC placed.

E: Parent informed that a soft diet is recommended and no chewing hard things on right side since it takes 24 hours for glass ionomer to completely harden. Use fluoride toothpaste to recharge the filling material twice a day. Contact a dental provider if there is pain, swelling, gum boil or if the filling is lost.

NV: 3 month recall for periodic exam.



Field Guides



Field Guides

Notes

ART Preparation

Cotton Rolls
Perio Probe
Hatchet
Spoon Excavators

1. Isolate
2. Condition
3. Mix Glass Ionomer
4. Place Glass Ionomer
5. Check Bite
6. Adjust Bite
7. Seal Glass Ionomer

* Insert and rotate hatchet in small lesions to open them.
** Use small spoon at dentino-enamel junction.
*** Use larger spoons at pulpal floor and when close to pulp.

ART Restoration Without Electricity

Isolate
Conditioner
Hand Mix Glass Ionomer
Articulating Paper

1 Drop, 1 Scoop, Divide

Putty

1. Isolate
2. Condition
3. Mix Glass Ionomer
4. Place Glass Ionomer
5. Check Bite
6. Adjust Bite
7. Seal Glass Ionomer

ART Restoration With Electricity

Isolate
Conditioner
Mix & Place
Adjust Bite & Seal

1. Isolate
2. Condition
3. Mix Glass Ionomer
4. Place Glass Ionomer
5. Light Cure Glass Ionomer
6. Check Bite
7. Adjust Bite
8. Seal Glass Ionomer

Hand Mix Glass Ionomer

1. Fuji II (Use bottom half only)
2. Fuji II (Push to top side 1/2 of powder in 1 drop liquid)
3. Fluff the powder (Lightly tap the bottle of powder against your hand)
4. Measure the powder (Use the scoop provided to dispense 1 level scoop)
5. 1 drop of liquid (Add the liquid carefully and gently together and 1 drop)
6. Divide the powder (Using the spoon divide the powder into 2 equal parts)
7. Mix part 1 (Mix the powder for 10-15 seconds)
8. Mix part 2 (Mix the powder for 10-15 seconds)
9. Consistency (Should be like putty, not too wet)

Triturate Glass Ionomer

1. Triturate Glass Ionomer
2. Remove From Packaging
3. Loosen Powder (Shake or tap for 10 seconds at the bottom)
4. Activate Capsule (Push the plunger to the top with the cap)
5. Click once (Place capsule in the upper and press once)
6. Mix Capsule (Push the plunger and mix for 10 seconds at 2000 RPM)
7. Remove and Load (Remove from upper and load into the upper)
8. Click Twice (Click the lower base and upper handle to release material)
9. (Final step image)

Glass Ionomer Working Time

Without Light

Mixing: 10 sec
Working: 1 min 40 sec
Setting: 2 min 30 sec
Final Finishing

With Light

Mixing: 10 sec
Working: 1 min 40 sec
Setting: 20 to 40 sec
Final Finishing

Articulating paper

Made of a thin, non-adhesive paper strip covered in fluorescent ink or dye-containing wax. It is used to mark the areas on the teeth where the teeth contact during biting and grinding.

Related Glossary Terms

Drag related terms here

Index

Find Term

Chapter 1 - Terms to Know

Atraumatic Restorative Treatment (ART)

Technique that involves removal of caries using only hand instruments and no anesthetic, and the placement of glass ionomer to restore a tooth.

Related Glossary Terms

Drag related terms here

Index

Find Term

Chapter 1 - Terms to Know

Bite

The way the upper (maxillary) and lower (mandibular) teeth come in contact during chewing or at rest. The dental term is occlusion.

Related Glossary Terms

Drag related terms here

Index

Find Term

Chapter 1 - Terms to Know

Cavitation

Hole in a tooth.

Related Glossary Terms

Drag related terms here

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Find Term

Chapter 1 - Terms to Know

Cleoid-Discoid

Instrument used to remove excess filling material, and shape a restoration.

Related Glossary Terms

Drag related terms here

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Find Term

Chapter 1 - Terms to Know

Contraindications

To make inadvisable, not recommended.

Related Glossary Terms

Drag related terms here

Index

Find Term

Chapter 1 - Terms to Know

Cotton Pliers

Instrument used to hold articulating paper.

Related Glossary Terms

Drag related terms here

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Find Term

Chapter 1 - Terms to Know

Dental Caries

Known as tooth decay or cavities.

Related Glossary Terms

Drag related terms here

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Find Term

Chapter 1 - Terms to Know

Dental hatchet

Instrument used to open a cavity or break off very weak unsupported enamel.

Related Glossary Terms

Drag related terms here

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Find Term

Chapter 1 - Terms to Know

Dentin

Tissue that is calcified and consists of tiny tubules or tubes. It is the second layer of a tooth and is normally covered by enamel and covers the pulp.

Related Glossary Terms

Drag related terms here

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Find Term

Chapter 1 - Terms to Know

Dentino-Enamel Junction (DEJ)

An area where the enamel (covers the crown of a tooth) meets the dentin (the inner part of the tooth covering the pulp).

Related Glossary Terms

Drag related terms here

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Find Term

Chapter 1 - Terms to Know

Desiccate

Drying a tooth to where all the moisture is removed.

Related Glossary Terms

Drag related terms here

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Find Term

Chapter 1 - Terms to Know

Excavating

Removing caries from a tooth to prepare a tooth for a restoration

Related Glossary Terms

Drag related terms here

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Find Term

Chapter 1 - Terms to Know

Extrude

Force out or discharge

Related Glossary Terms

Drag related terms here

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Find Term

Chapter 1 - Terms to Know

Fluoride

Strengthens and protects teeth from tooth decay.

Related Glossary Terms

Drag related terms here

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Find Term

Chapter 1 - Terms to Know

Glass ionomer

Dental material that chemically bonds to enamel and dentin, releasing fluoride over time; used in ART.

Related Glossary Terms

Drag related terms here

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Find Term

Chapter 1 - Terms to Know

Indications

To make advisable, recommended.

Related Glossary Terms

Drag related terms here

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Find Term

Chapter 1 - Terms to Know

Occlusion

The way the maxillary (upper) and mandibular (lower) teeth come together during chewing or at rest.

Related Glossary Terms

Drag related terms here

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Find Term

Chapter 1 - Terms to Know

Probe

Instrument used to determine the softness of the dentin.

Related Glossary Terms

Drag related terms here

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Find Term

Chapter 1 - Terms to Know

Pulp

Area of connective tissue, blood vessels, and nerves located in a chamber within the dentin layer of a tooth. It is found in the crown and the root of a tooth.

Related Glossary Terms

Drag related terms here

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Chapter 1 - Terms to Know

Pulp exposure

Bleeding or the appearance of a dark hole in the tooth where the pulp chamber is located. There may be the smell of dead tissue, and the tooth becomes sensitive.

Related Glossary Terms

Drag related terms here

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Find Term

Chapter 1 - Terms to Know

Smear layer

A thin yet tenacious coating of tooth debris that appears after dental instrumentation. It prevents adequate bonding of glass ionomer to tooth structures. It is not easily rinsed away, and must be removed by acid etching.

Related Glossary Terms

Drag related terms here

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Find Term

Chapter 1 - Terms to Know

Spoon Excavator

Instrument used to remove plaque and debris from the tooth.

Related Glossary Terms

Drag related terms here

Index

Find Term

Chapter 1 - Terms to Know

Triturate

The process of mechanically mixing restorative dental materials like glass ionomer or amalgam.

Related Glossary Terms

Drag related terms here

Index

Find Term

Chapter 1 - Terms to Know

Triturator

Dental device that is used to mix dental materials like amalgam and glass ionomer.

Related Glossary Terms

Drag related terms here

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Chapter 1 - Terms to Know