

HS-SM-17 Therapeutic Modalities

Understanding Therapeutic Modalities

Objective:

Students will be able to analyze and describe the appropriate use of therapeutic modalities by identifying the types, describing the physiological effects, and recognizing indications and contraindications for cold and hot therapies, ultrasound therapy, electrotherapy, manual and mechanical modalities therapy, and light modalities.

Assessment:

Create a scenario where students are presented with different patient cases, and they have to recommend the most appropriate therapeutic modality based on the patient's condition, considering the physiological effects and contraindications.

Key Points:

- Different types of therapeutic modalities
- Physiological effects of each modality
- Indications and contraindications for therapeutic modalities
- Application of therapeutic modalities based on patient conditions
- Importance of understanding proper use of therapeutic modalities

Opening:

- Show a short video demonstrating the application of different therapeutic modalities
- Ask students: "Why is it important for healthcare professionals to have a deep understanding of therapeutic modalities?"

Introduction to New Material:

- Discuss different types of therapeutic modalities and their main purposes
- Clarify the physiological effects of each modality
- Anticipated misconception: Students may think all modalities are interchangeable regardless of the patient's condition

Guided Practice:

- Provide case scenarios for students to analyze and recommend the most suitable modality
- Scaffold questioning from easy (identifying the modality) to hard (explaining why it is the best choice)
- Monitor student performance by circulating the room and providing guidance as needed

Independent Practice:

- In groups, students will create a presentation on a specific therapeutic modality, detailing its physiological effects, indications, and contraindications
- Each group will present their findings to the class for peer review

Closing:

- Ask students to summarize the key points discussed in the lesson
- Have a class discussion on real-life applications of therapeutic modalities in healthcare settings

Extension Activity:

- Research a recent case study where therapeutic modalities were used effectively in a medical setting and present a summary to the class

Homework:

- Write a reflection on the importance of selecting the most appropriate therapeutic modality for a patient's condition

Standards Addressed:

- HS-SM-17: Analyze and describe the appropriate use of therapeutic modalities.
- HS-SM-17.1: Identify the types, describe the physiological effects, indications, and contraindications in the use of cold and hot therapies, ultrasound therapy, electrotherapy, manual and mechanical modalities therapy, light modalities.

Therapeutic Modalities

HS-SM-17 Analyze and describe the appropriate use of therapeutic modalities.

Purpose

- _____
- _____

Key Terms

- Vasoconstriction
 - _____
- Vasodilation
 - _____
- Conduction
 - _____
- Convection
 - _____
- Conversion
 - _____

Acute Response to Injury

- Inflammatory Phase _____
- Repair Phase _____
- Remodeling Phase _____



Pain-Spasm-Pain Cycle

- _____
- _____
- _____
- _____

Rice, Price, etc.

- P - _____
- R - _____
- I - _____
- C - _____
- E - _____

Pain-Spasm-Pain Cycle



HS-SM-17
17.1

Name _____ Period _____

Match the following terms with their definition.

- 1. ____ Vasoconstriction A. Transfer of heat between objects
- 2. ____ Vasodilation B. Transfer of heat through fluid or gas
- 3. ____ Conduction C. Blood vessels decrease in size
- 4. ____ Convection D. Generation of heat through a mechanic process
- 5. ____ Conversion E. Blood vessels increase in size

6. Explain the pain-spasm-pain cycle.

What does the acronym PRICE stand for?

- 7. P _____
- 8. R _____
- 9. I _____
- 10. C _____
- 11. E _____

Define the following terms

12. Cryotherapy _____

13. Thermotherapy _____

Read the following scenarios. For each scenario name the modalities that you would use and explain why.

A soccer player just had ACL surgery and is coming for her first day of rehabilitation. You notice that she is in a lot of pain. You begin taking her through rehabilitation exercise, but she is not able to complete the exercises because her quadriceps won't contract.

14. Choose one modality to use for her pain and explain why.

15. Choose one modality to help her with quadriceps contraction and explain why.

A basketball player comes to you with patella tendonitis before a game. He tells you that it has been hurting for a while and his knee feels real stiff.

16. Choose two modalities that you can use to help with his tendonitis and explain why.

18. Choose one modality that would help her after practice and explain why.

A football player sprains his ankle at practice. He is in a lot of pain and you notice that it is beginning to swell.

19. Choose one modality that you would use at practice to help and explain why.

20. In a week the swelling is gone, but the football player's ankle is real stiff. Choose one modality that could be used and explain why.

An athlete dislocates her shoulder. You reduce the dislocation and put her in a sling.

21. What modality could you use and explain why.

ing room complaining of pain on the bottom of plantar fasciitis because her arch is falling in her

before practice and explain why.

Therapeutic Modalities- Summative Evaluation