DOCUMENT 1: Learning Module

Transcript

- Intended as a resource for educators to guide students through video lectures
- Consists of
  o Embedded video lectures (video times in parentheses)
  o Transcript of videos
  o Summary notes
- Cross-referenced with academic standards (subscripts)

Pre-Class Activity

- Intended to be distributed prior to completing learning module
- Consists of
  o 5 multiple choice questions
  o 1 discussion question - Intended for students to brainstorm answers and begin class with discussion with teacher
  o Supplemental materials for in-class demonstrations
- Cross-referenced with academic standards (subscripts)

In-Class Activity

- Intended to be completed with teacher in the classroom
- For the following modules: Temperature, Pressure, Water
- Consists of:
  o Multiple choice
  o True/False
  o Short answer
  o Calculations
- All other modules consist of:
  o Activity where students are put into groups and given a set of tasks based on the group’s role which consist of:
    o Technical tasks
    o Calculations
    o A presentation of their completed tasks to share with the class what they have learned
- Cross-referenced with academic standards (subscripts)
Take Home Assignment

• Intended to be completed at home
• Consist of:
  o Multiple choice
  o True/False
  o Short answer
  o Calculations
• Cross-referenced with academic standards (subscripts)

Student Evaluation (Pre and Post Assessment)

• Intended to be taken before and after completing module for evaluation on effectiveness of modules
• Consist of:
  o 8 multiple choice or true/false
  o 1 short answer
  o 1 calculation
• Cross-referenced with academic standards (subscripts)

Academic Standards Summary and Links

• Intended as a resource for educators
• Consist of:
  o Links to learn more about Common Core and Next Generation Science Standards
  o Subscript representing the standard throughout the learning module
  o Standard code and link
  o Summary of standard directly taken from CCSS and NGSS webpages
  o Location of where standards are met within the learning module