Lesson Plan

Teacher:	Wardensky	Grade Level and Subject:	3rd Grade Science	Time Frame:	45 minutes

SOL Objectives

3.3 The student will investigate and understand that objects are made of materials that can be described by their physical properties. Key concepts include

a) objects are made of one or more materials;

b) physical properties remain the same as the material is changed in visible size; and

c) visible physical changes are identified.

Essential Questions	Learning Objectives	Assessments
In order to meet this standard, it is expected that students will · explain that physical properties are observable characteristics that enable one to differentiate objects. · infer that objects are made of one or more materials based on observations of the physical properties that are common to each individual object. · compare the physical properties of smaller, visible pieces of a material to those physical properties of the entire material. · conclude that materials have their own set of physical properties that are observable. · design an investigation to determine if the physical properties of a material will remain the same if the material is reduced in size.	The students will work in collaborative groups to "Breakout" the States of Matter by finding and working to unlock the 4 locks to breakout with at least 50% of student groups successful.	Teacher observation: ● Working in Collaborative group ● Use of hint cards (What kind of questions are they asking?) ● Breakout

Instructional Procedures	Differentiated Activities and Strategies

Lesson Plan

The teacher will:

- Explain the rules of a digital breakout to students. Making sure to explain that anything can be a hint. (Read, Read, Read!) See attached sheet for how to implement a digital breakout.
- Divide students into cooperative groups of 2
- Pass out hint cards and explain how to use them. (2 per group)
- Use iStation to show QR code then timer for the breakout
- Start the digital breakout
- Walk around and give hints if students have hint cards, otherwise offer no help.
- Debrief after the digital breakout is over.

The students will:

- Scan the QR code with iPads and select “go online”
- Click the Tribe the class voted on to go to that digital breakout.
- Students work in a collaborative group to solve the 4 different locks to “Breakout”
- Celebrate your successes and failures.

- Students will work at their own pace to complete the digital breakout with their group.
- If a student can’t work with a group he can work alone.
- If they finish early they can choose to try a different breakout.

Teacher Checklist

☒ Critical thinking / Problem-solving
☒ Communication / Collaboration
☐ Transformative Connection
☐ Project Based Learning
☒ Higher Order Thinking Questions (Analytical, Synthesis, Interpretive, Evaluative)

Notes:

Resources and Technology Connections

Digital Breakout website: States of Matter - https://sites.google.com/view/statesofmatter3-5/home
iPads – 2 or 3 students per iPad
QR Code Reader App
Desktops – if needed
iStation
PPT of QR Codes
Symbaloo of Digital Breakouts: https://sites.google.com/view/digitalbreakoutvault/home
Hint Cards
Paper & Pencils or Dry Erase boards and marker
Online timer: https://www.online-stopwatch.com/