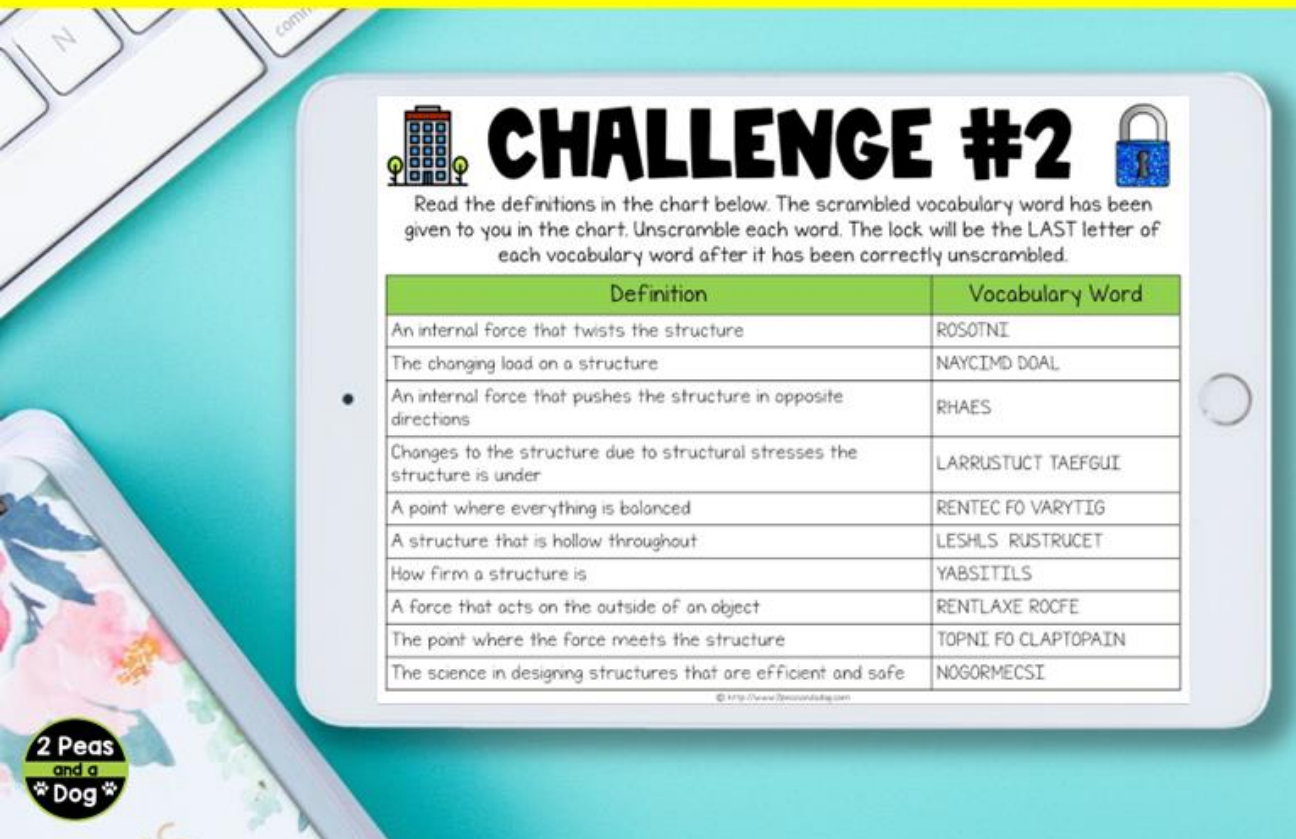


STRUCTURES & MECHANISMS

DIGITAL ESCAPE ROOM

EDITABLE & DIGITAL



CHALLENGE #2

Read the definitions in the chart below. The scrambled vocabulary word has been given to you in the chart. Unscramble each word. The lock will be the LAST letter of each vocabulary word after it has been correctly unscrambled.

Definition	Vocabulary Word
An internal force that twists the structure	ROSOTNI
The changing load on a structure	NAYCIMO DOAL
An internal force that pushes the structure in opposite directions	RHAES
Changes to the structure due to structural stresses the structure is under	LARRUSTUCT TAIEGVI
A point where everything is balanced	RENTEC FO VARYTIG
A structure that is hollow throughout	LESHLS RUSTRUCET
How firm a structure is	YABSITILS
A force that acts on the outside of an object	RENTLAXE ROCFE
The point where the force meets the structure	TOPNI FO CLAPTOPAIN
The science in designing structures that are efficient and safe	NOGORMECSEI

RESOURCE INCLUDES

1. Digital Escape Room
2. 10 Challenges “Locks”
3. Teacher Instructions
4. Student Instructions
5. Answer Key
6. Reflection Questions



“The students love these kinds of challenges, an escape room always gets them interested and working, love this resource.”
– Vassiliki B.

THE RULES

ESCAPE ROOM RULES



1. Once you and your team are ready to start, hit the timer button. You are not allowed to pause or change the time. Your teacher will tell you how long to set the timer for.
2. Make sure you look at and read **EVERYTHING** in each section including titles, images, etc.
3. Write answers in **ALL CAPS** with **NO SPACES**.
4. You are allowed **ONE FREE HINT**.
5. You can get two more hints, but they will cost you 3 minutes on the clock per hint!
6. Please do not Google the answers.
7. Please do not share your answers with other students.

**STUDENTS CAN
PLAY:**

- ✓ **INDIVIDUALLY**
- ✓ **PAIRS**
- ✓ **GROUPS**

THE STORYLINE

STRUCTURES FIELD TRIP



You are on a walking field trip with your science class to look at different structures and mechanisms in your school's neighborhood. As your class stops to look at the structure of a cast iron statue in the park, you decide to walk into the park further to check out a waterfall. Without thinking, you continue over a bridge to continue exploring until you realize you went the wrong way and have no idea where you actually are! Complete the next ten locks to make your way back to your class.

SAMPLE CHALLENGE

CHALLENGE #3

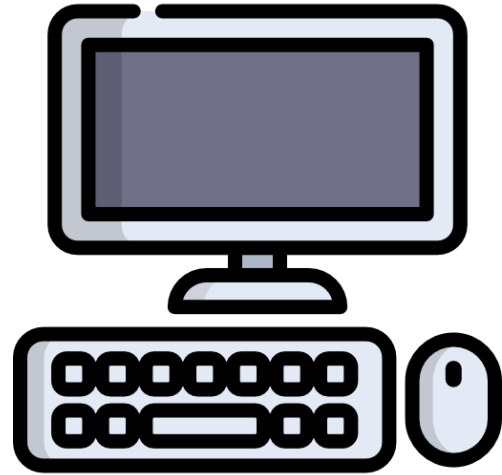
Below is a list of various, everyday structures. Give each letter a 1 if a SOLID STRUCTURE is listed, a 2 if a FRAME STRUCTURE is listed, or a 3 if a SHELL STRUCTURE is listed. Your lock will be an 8-character letter/number code.

- A. Watering can
- B. Bridge
- C. Bean pod
- D. Wooden telephone pole
- E. Concrete dam
- F. Umbrella
- G. Car body
- H. Tree

**STUDENTS USE
PROVIDED
INFORMATION
TO SOLVE THIS
CHALLENGE**



LESSON FORMAT



DIGITAL

✓ Editable Google Form


A screenshot of a digital escape room interface. At the top is a banner image of a suspension bridge. Below the banner, it says "Section 1 of 15". The main title is "Structures and Mechanisms Digital Escape Room". Below the title is a subtitle: "Work through each set of challenges to solve the escape room." There are three text input fields: "First Name *", "Last Name *", and "Class Code or Period *". Each field has a "Short answer text" label and a dotted line for input.


RESOURCE CAN BE USED IN-PERSON OR ONLINE

LOVE DIGITAL ESCAPE ROOMS?

DIGITAL ESCAPE ROOM MEGA BUNDLE


EDITABLE & DIGITAL



CHALLENGE #1 

Watch the linked video and answer the questions below.
Use the answers to create the eight-letter code.

1. Who are the experts that design bridges? A. Mechanics B. Engineers C. Teachers D. Financial Analysts	3. What are strong materials that large, sturdy bridges are often made of? A. Iron and steel B. Plastic and copper C. Steel and plastic D. Copper and iron
2. Which bridge is said to be the world's busiest bridge? A. Golden Gate Bridge B. Sydney Harbor Bridge C. Confederation Bridge D. George Washington Bridge	4. What is the most basic type of bridge? A. Arch bridge B. Suspension bridge C. Beam bridge D. Truss bridge



**11 DIGITAL
ESCAPE ROOMS**

2 Peas
and a
Dog



DIGITAL ESCAPE ROOM MEGA BUNDLE

Get 11 exciting digital escape rooms to entertain and educate your middle school students. These digital escape rooms reinforce critical thinking, problem solving and literacy skills.

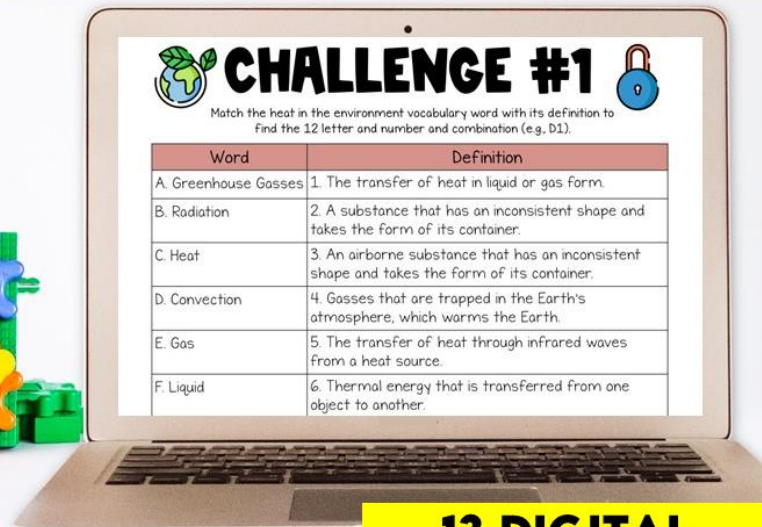
Purchase this bundle by clicking [here](#).

TEACH SCIENCE?



DIGITAL ESCAPE ROOM SCIENCE BUNDLE

EDITABLE & DIGITAL



CHALLENGE #1

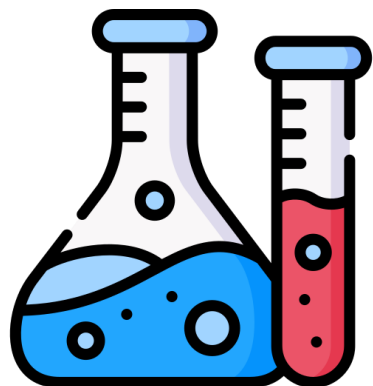
Match the heat in the environment vocabulary word with its definition to find the 12 letter and number combination (e.g. D1).

Word	Definition
A. Greenhouse Gasses	1. The transfer of heat in liquid or gas form.
B. Radiation	2. A substance that has an inconsistent shape and takes the form of its container.
C. Heat	3. An airborne substance that has an inconsistent shape and takes the form of its container.
D. Convection	4. Gasses that are trapped in the Earth's atmosphere, which warms the Earth.
E. Gas	5. The transfer of heat through infrared waves from a heat source.
F. Liquid	6. Thermal energy that is transferred from one object to another.

**13 DIGITAL
ESCAPE ROOMS**

SCIENCE DIGITAL ESCAPE ROOM BUNDLE

Get 13 exciting digital escape rooms to entertain and educate your middle school students. These digital escape rooms reinforce critical thinking, problem solving, science and literacy skills.



Purchase this bundle by clicking [here](#).