

A HYDROTHERMAL ADVENTURE – BUILD YOUR OWN UNKNOWN

FACT or FICTION Student Evaluation Game

Approximate time to complete: 15 minutes

Taking inspiration from the script of *Build Your Own Unknown* which merges scientific fact with a fictional narrative, play a game of fact or fiction to evaluate student learning.

Play the game twice; at the beginning of the module after the students first viewing of *Build Your Own Unknown* and at the end of the completed module or related lesson plans.

Alternatively create a set of questions based on the glossary and use to play fact or fiction.

Record results each time and compare statistics to determine the class percentage increase/decrease in learning.

Game Instructions:

1. Watch *Build Your Own Unknown* short film in class. Students should know by now that the film combines scientific fact with fictional narrative and if they are in the process of making their own film should have a good understanding of this.
2. Ask the class the FACT or FICTION Table of Questions
3. Students respond after each question by displaying / holding up either the FACT or FICTION game card
4. Ask the scorekeeper to count and record the number of students who answer FACT and FICTION
5. After the exercise is complete explore the answer to each question as a class, revealing if indeed it is FACT or FICTION
6. Compare the results from each game to calculate the increase/decrease in student learning.

Preparations:

- A copy of *Build Your Own Unknown* hydrothermal adVENTure film available for class viewing
- Printed FACT or FICTION game cards (template plus instructions provided)
- Nominate a student who will be responsible for keeping score
- Devise two questions that relate to lesson plans undertaken in the classroom / the students own film and enter into Q11 and Q12 of the FACT or FICTION Table of Questions.

Game Card Template Printable Instructions:

1. Print the FACT game card template on A4 paper or light card. One sheet contains 8 game cards. Print the number of sheets required so each student in the class will have one game card.
2. Print the FICTION game card template on the blank reverse side of the FACT printed sheets. The template is formatted for both designs to align.
3. Cut out the game cards.
4. Distribute one game card per student.

A HYDROTHERMAL ADVENTURE – BUILD YOUR OWN UNKNOWN FACT or FICTION Questions

Questions		Fact	Fiction
Q1	The RV <i>Celtic Explorer</i> is the name of the Irish research vessel used in the discovery of the Moytirra hydrothermal vents field		
Q2	Humans can safely descend to 3,000 meters under the ocean without the use of technology		
Q3	Moytirra hydrothermal vents field was discovered by a team of marine scientists lead by Professor Andy Wheeler in 2011		
Q4	Balor is the name given to the tallest hydrothermal vent in Moytirra hydrothermal vents field		
Q5	The remotely operated vehicle collects samples from the ocean with pincers and a robotic arm that is controlled by a pilot on board the research vessel		
Q6	The hydrothermal vent ecosystem provides food for the creatures that live there		
Q7	Creatures that live around the hydrothermal vents need sunlight to survive		
Q8	Over 300 new species have been discovered in the hydrothermal vent ecosystems		
Q9	Seawater inside the hydrothermal vents is heated by hot magma		
Q10	Hydrothermal vents are known to self destruct		
Q11			
Q12			

FACT or FICTION Table of Questions Teacher Answers			
Q1	FACT	Q7	FICTION
Q2	FICTION	Q8	FACT
Q3	FACT	Q9	FACT

Q4	FACT	Q10	FACT
Q5	FACT	Q11	FACT/FICTION
Q6	FACT	Q12	FACT/FICTION

FACT Game Card Printable Template

FACT	FACT
FACT	FACT
FACT	FACT

FACT	FACT
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FICTION Game Card Printable Template

FICTION	FICTION
FICTION	FICTION
FICTION	FICTION

FICTION

FICTION