Model Exploration in VIVED Science

VIVED Science Launch Code: **AP27**

Learning Objective:

Make predictions about how the movement of an object can influence sound.

Model Name:

Turbine Engine

Lesson Description:

The Turbine Engine model does not make sound but does provide movement. This model provides the ability to make predictions of how movement of an object can influence sound.

Questions & Answers

Introduction:

The turbine engine is commonly used on jet aircrafts.

Directions:

Locate the turbine engine model.

Dissect the turbine engine to examine and find your answers for the questions 1 and 2 on the right.

Use the slider to adjust the thrust and answer questions 3 and 4 on the right.

Answer the following questions.

1. Determine which sounds could cause materials to vibrate (List)
2. Determine which vibrating materials can cause sounds (List)
3. Describe how motion vibration changes as thrust is increased and decreased.
4. Predict how sound would change as thrust is increased and decreased. Complete the following table to show your predictions.

Thrust	Sound
Increase	
Decrease	

More time to explore!

Choose a new model.
- Exit your model by selecting the Home icon.
- Scroll through the list of models using your stylus or the mouse wheel.
- Select a category to the left to see a collection of models.
- Alternatively, enter a keyword in the search bar to find a model.

Click on an image to open a new model.

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VIVED Science Launch Code: **AP27**

Learning Objective:

Relate structure and function in viruses.

Model Name:

Coronavirus

Lesson Description:

A new, previously unidentified, coronavirus is causing coronavirus disease 2019 (COVID-19). In this lesson, you will learn about the structure of a virus and relate that structure to its function. Following the lesson, you will make connections between the virus and precautions being taken.

Questions & Answers

Introduction:

Covid-19 is caused by a type of coronavirus.

Directions:

Locate the coronavirus model.

Answer the following questions.

1. Draw and label the parts of the coronavirus.
2. What do you think the function of glycoproteins is?
3. What do you think the function of the capsid is?
4. What do you think the function of the RNA strands is?

Discuss as a class why a virus needs a human host.

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Model Exploration in VIVED Science

Learning Objective:

How do Marine Animals Locate their Food?

Model Name:	**Lesson Description**:
Starfish Beluga Whale	Explore two different models in VIVED Science, the starfish and the beluga whale. Learn how these two marine animals locate their food by examining their physical structures.

Questions & Answers

Introduction:

Starfish move along the bottom of the ocean floor to find their food.

Beluga whales locate their food differently from the starfish. They have a special structure that allows them to find their food using sound waves.

Directions:

Locate the starfish model. Dissect the starfish to investigate and find your answers for the questions 1 and 2 on the right.

Exit the starfish model by selecting the Home menu.

Locate the beluga whale. Dissect the beluga what to investigate and find your answer for question 3 on the right.

Answer the following questions.

1. Examine the starfish and locate the mouth. Where is the mouth located? Describe.

2. Think about how the starfish find their food. Why do you think their mouth is in that location? Describe.

3. Examine this beluga whale, and locate the structure that allows them to find their food using sound waves. *(Hint: It can be found in the rounded part of their forehead.)* What is the name of this structure?

BONUS: What is the process of using sound waves to locate food called?

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