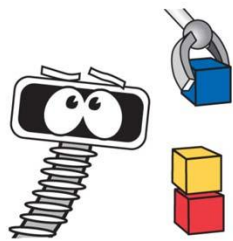


CONCEPT BUILDER

Island Castaway

In this activity students will use their knowledge of the properties of matter to create and/or design items needed for survival on a deserted island.	
Student work should include:	<ol style="list-style-type: none">1. At least four completed survival scenarios.2. A list of specific items selected for each scenario.3. A detailed, labeled drawing or 3-D model of the item created or designed for each scenario.4. A written explanation of how and why specific items were chosen (based on their properties of matter), how the items were created or designed, and how the items were useful for survival.
Evaluated Key Concepts:	<ol style="list-style-type: none">1. Matter has physical properties that can be observed.2. We can classify matter based on its physical properties using tools such as balances, magnets, and electric circuits.3. We can classify matter based on its behavior such as ability to float or sink, attraction to a magnet, solubility in water, and ability to conduct heat or electricity.





Name: _____ Date: _____

CONCEPT BUILDER

Island Castaway

<p>Mission: Use your knowledge of the properties of matter to create and/or design items needed for survival on a deserted island.</p>		<p>Materials:</p> <ul style="list-style-type: none"> • Paper (1 per student) • Island Castaway sheet (1 per student) • Pencils, markers, crayons • Items needed for 3-D model (optional)
<p><i>To complete the mission, be sure to include:</i></p>	<ol style="list-style-type: none"> 1. At least four completed survival scenarios. 2. A list of specific items selected for each scenario. 3. A detailed, labeled drawing or 3-D model of the item created or designed for each scenario. 4. A written explanation of how and why specific items were chosen (based on their properties of matter), how the items were created or designed, and how the items were useful for survival. 	

Student Checklist

Review each statement below. Rate your final product based on the following:
1 = I included **none** of this in my final product.
3 = I included **some** of this in my final product.
5 = I included **all** of this in my final product.

I completed at least four survival scenarios.

1	2	3	4	5
---	---	---	---	---

I explained how I used all items listed in my solution to each scenario.

1	2	3	4	5
---	---	---	---	---

I explained why I chose the all the items in my solution to each scenario.

1	2	3	4	5
---	---	---	---	---

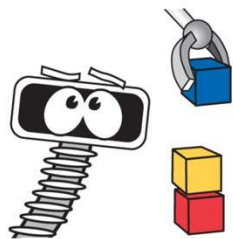
I explained how I chose at least one item as part of my solution based on its physical properties for each scenario.

1	2	3	4	5
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I provided a detailed, labeled drawing or a 3-D model of my solution to each scenario.

1	2	3	4	5
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Name: _____ Date: _____

CONCEPT BUILDER

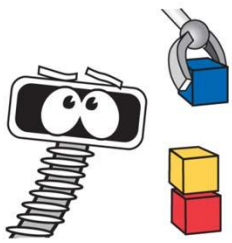
Island Castaway

Mission Instructions:

You have been stranded on a deserted island. With only your surroundings and the items in your bag, you will need to complete at least four of the various survival scenarios using your knowledge of the properties of matter to determine how items in your bag can assist you in surviving.

1. Review the lists of your surroundings and the items in your bag. These are the only items you have on the island.
2. Review the Survival Scenarios and pick at least four scenarios.
3. Use your knowledge of the properties of matter to select items and create and/or design items that will help you survive for each scenario. Use only the items you have on the island.
4. Make a list of the specific items you selected for each scenario.
5. Include a detailed, labeled drawing or a 3-D model of what you created or designed to help you survive for each scenario.
6. Include a written explanation of why you chose the objects you did (based on their properties of matter), how you created or designed your item, and how the item assisted you in surviving.





Name: _____ Date: _____

CONCEPT BUILDER

Island Castaway Scenarios

Survival Items		
Surroundings	Items in Your Bag	
<ul style="list-style-type: none"> ▪ Sun ▪ Sand ▪ Ocean water with shells and fish ▪ Trees ▪ Coconuts ▪ Rocks of various shapes and sizes 	<ul style="list-style-type: none"> ▪ Knife ▪ Metal pot ▪ Plastic wrap ▪ Aluminum foil ▪ Fur from a bear ▪ Paper clip ▪ Foam ▪ Knit sweater ▪ Metal toed shoes 	<ul style="list-style-type: none"> ▪ Balloon ▪ Hairbrush ▪ Gummy bears ▪ Plastic bowl ▪ Package of 4 golf balls ▪ Black paint

Survival Scenarios	
<p>Scenario #1: Create freshwater so you have something to drink.</p>	<p>Scenario #2: Design a way to keep yourself warm during the cold nights.</p>
<p>Scenario #3: Create a way to separate sand from seashells.</p>	<p>Scenario #4: You found cool water on a hike. Design a container that will keep the water cool.</p>
<p>Scenario #5: Design a way to catch fish.</p>	<p>Scenario #6: Explain how you will cook food in the evening.</p>
<p>Scenario #7: Design a tool to stir hot items.</p>	<p>Scenario #8: Determine which objects you will use to hold down your shelter.</p>

