



Activity Idea

Activity	Who sank the boat
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Possibilities for maths learning	<input type="checkbox"/> Counting	<input type="checkbox"/> Composition	<input type="checkbox"/> Cardinality
	<input type="checkbox"/> Subitise	<input type="checkbox"/> Comparison	<input type="checkbox"/> Measure
	<input type="checkbox"/> Shape	<input type="checkbox"/> Pattern	<input type="checkbox"/> Spatial awareness

Resources	<ul style="list-style-type: none"> ➤ A water table large enough to have several children gather around ➤ Recycled cardboard or plastic milk cartons ➤ A balance scale ➤ Chart paper and markers ➤ Weighted objects such as pennies, rocks or heavy manipulatives that are small enough to fit into the milk carton boats
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Activity Outline	<p>Before beginning the activity, prepare the milk cartons or. For cardboard cartons you can staple the spout closed or secure the lid. If possible cut each carton in half vertically to make 2 boats. If not then simply cut a hole in one side to make a boat. For plastic milk cartons, seal the lid and cut a hole in one side to make a boat.</p> <p>You could add a sail by taping a paper triangle to a craft stick and placing the stick in a ball of playdough in the centre of the boat.</p> <p>Firstly with the children, introduce them to the manipulatives. Allow children to explore the resources and say which they feel is lighter than, heavier than or the same as other resources. Make a list of heaviest and lightest and where things come in-between.</p> <p>Demonstrate how the scale/balance is used. Use the weighed objects to test out hypothesise and determine which object is the heaviest, which object is the lightest and which objects weigh the same.</p> <p>Give children a boat to work individually or as a team. (If there is enough for one each you might allow them to decorate their boats to help distinguish the boats from one another).</p> <p>At the water table, have the children place their boats in the water. Using the weighted objects, have the children try to sink their boats. Have them experiment with the objects. How many different objects does it take to sink the boats? How many of the same objects does it take to sink the boat? How many of the lightest objects does it take to sink the boat? How many of the heaviest objects does it take to sink the boat? Are the boats</p>
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	different? If it takes 10 pennies to sink a boat, does it also take 10 pennies to sink another child's boat? Have the children record their results.
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Extension Opportunities	✓ Ask children to close their eyes. Give them two objects, one in each hand to compare the weight. Ask: Which object is heavier? Which object is lighter? Have the children check their answers on the scale.
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