

Kindergarten Student Resource Contents

Resource Title:
The title of the resource relates to an Overall Expectation of the Math Curriculum.

Activity List:
The learning outcome for each activity is listed here. This makes it easier for teachers to target specific concepts for teaching, diagnostic or formative assessment purposes.

Big Ideas:
Groups of activities are organized around key Math concepts as they relate to the expectation noted in the title.

Teacher Section:
Teachers will find helpful tips and Learning Connections Activity Suggestions at the back of each resource.

COMPARE AND ORDER TWO OR MORE OBJECTS ACCORDING TO ONE MEASURABLE ATTRIBUTE	
Student Activities	
<p>Compare and order objects by the measurable attribute of length</p> <ul style="list-style-type: none"> Relate each bug to its match by length.....1 Relate each snake to a rope of the same length.....2 Relate each object to its place in an ordered set.....3 Relate each object to its corresponding outline.....4 Compare each thickness with its corresponding thickness.....5 Relate each object to its place in an ordered set.....6 <p>Compare and order objects by the measurable attribute of capacity</p> <ul style="list-style-type: none"> Relate each object to its match by size.....7 Compare the size of each character to an object of relative size.....8 Relate each object to its place in an ordered set.....9 Relate each present to its match by size.....10 Compare each shape to another shape of the same relative size.....11 Relate each object to its place in an ordered set.....12 <p>Compare and order objects by the measurable attribute of mass</p> <ul style="list-style-type: none"> Relate each object to its representation of relative mass.....13 Relate each object to its place in an ordered set.....14 Compare each picture to the match which shows relative mass.....15 	<p>Compare objects by the measurable attribute of area</p> <ul style="list-style-type: none"> Relate each outline to the shape that covers its area.....16 Relate each area outline to the shape or shapes that cover it.....17 Relate each area outline to the shapes that cover it.....18 <p>Identify and describe appropriate dress and activities for a variety outdoor temperatures</p> <ul style="list-style-type: none"> Connect each weather picture to the picture that shows appropriate clothes or accessories for that kind of weather.....19 Relate each picture to its corresponding weather.....20 Connect each scene to its corresponding appropriate object.....21 <p>Identify standard and non-standard measuring tools appropriate for particular kinds of measurement</p> <ul style="list-style-type: none"> Connect each set of objects to its representation on a balance.....22 Connect the length of each object with the non-standard units used to measure it.....23 Connect each object to its best standard or non-standard measuring tool.....24
Teacher Section	
<p>How to Use QUICKCHECK Math and Tips for Success.....25</p>	<p>Learning Connection Activity Suggestions</p> <ul style="list-style-type: none"> Mathematical Process Expectations: Problem Solving, Communicating and Selecting Tools and Computational Strategies.....26
<p>GETTING READY TO USE QUICKCHECK You need a book and a case with six tiles.</p> <ul style="list-style-type: none"> Open the book to Activity 1. Put the empty tile case over the book. The CHECKMARK will cover the answer key. There are six squares in the top section. Place each tile on the square that has the same icon. Lift each tile to reveal the image underneath. Transfer each tile to its corresponding image below. Close the cover of the tile case. Flip the tile case up. The answer key will appear. The tile pattern should match the answer key. 	

Kindergarten Student Resource Activity Page

Activity Title:
States the targeted learning outcome:
Teachers know the purpose of the activity at a glance.

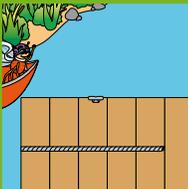
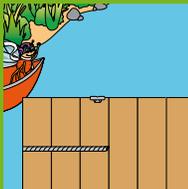
Activity Extension:
Provides new information for teachers or, ideas for further development of the activity.

2

Relate each snake to a rope of the same length.

■ A strategy: Have students identify the longest and shortest snakes first. Ask: "How do you know?"
 If students have not counted the planks of the dock to identify length, suggest that strategy.



1. Match:
Students begin each activity by matching the shape icons on the tiles, to those in the squares of the top grid of the resource.

2. Think & Play:
Students move each tile from the top grid to the correct square in the bottom grid until all the tiles have been transferred.

3. Check:
Students close the cover of the plastic case and flip it up to see if the pattern revealed on the back of the tiles matches this answer key.

Kindergarten Teacher Section

Learning Connection Activity Suggestions:

These suggestions are organized around the same key math concepts addressed in the 24 activities. They relate to some of the Mathematical Process Expectations used in the Math Curriculum.

26

TEACHER SECTION

LEARNING CONNECTION ACTIVITY SUGGESTIONS

Mathematical Process Expectations: Problem Solving, Communicating and Selecting Tools and Computational Strategies

■ Compare and order objects by the measurable attribute of length

Prepare a template of a cube train ten cubes long at the top of 8.5" by 11" paper. Now, have students make a connecting cube train that is either three, six or ten cubes long. Have a scavenger hunt: "Find something that is about as long as your cube train and bring it back to the table."

Students will use the template to record as many of the following as they can:

- 1) Colour the number of cubes they used in their train.
- 2) Draw a picture of the object they measured.
- 3) Complete the sentence: "A _____ is about ___ cubes long."

Next steps:

"Can you find one thing that is longer than your object; one thing that is shorter? Put three objects in order from shortest to longest. Tell a partner."

As a large group activity, make an anchor chart for each of three, six and ten cube train lengths.

At the top of each chart write the heading "How long is it?" Then divide the chart into three columns titled: About the same, Shorter, Longer. The teacher/students can draw on chart paper the items the students find.

■ Compare and order objects by the measurable attribute of mass

Using a balance, have students order a ping-pong ball, golf ball and a small sponge ball from heaviest to lightest: "How can things that are close to the same size and shape have different masses?"

Students don't have to answer this question right away. It is good to pose the question to give them a chance to reflect on the fact that mass doesn't have to do with the size of an object necessarily but rather the material of which it is made.

For further experience with this concept, have a group of large things that have a smaller mass than a group of smaller things with a larger mass. Let students use a balance to compare the relative masses of these objects.



TEACHER SECTION

■ Compare objects by the measurable attribute of area

Gather a small group around a square or rectangular table and pose the following problem: "We are going to do something messy at this table. I don't want the table to get dirty. What should we do?" Let students respond.

"Now, I don't have a table cloth, but I do have three kinds of paper we can use to cover the whole area of the table. I have sticky notes, photo copy paper, and newspaper (show students examples of each). Which would be the best to use to cover the area of the table? How do you know?"

After the group chooses one type of paper, ask them to estimate how many pieces it will take to cover the table. After estimates are recorded, help students cover the table so that there is no overlapping paper. After you cover the table completely, count how many pieces of paper you used.

Make a simple chart to record results:

Object	Area
	<input type="text"/> pieces of newspaper
	<input type="text"/> pieces of paper
	<input type="text"/> sticky notes

Here are some follow-up questions you can ask:

"If we choose another type of paper, will we cover the area of the table faster? Let's try another way and see."

"Is there another area that is the same as this table top? How can we know for sure?"

"Find an area that is smaller than the table top. What would be the best way to cover it/measure its area?"

Expand your chart to include any new area you cover.