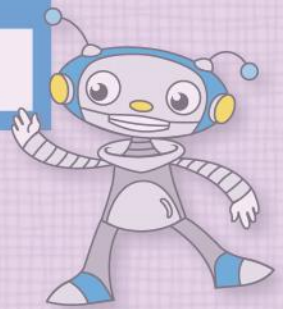


# QUICKCHECK™

## MATH



# K

## DATA MANAGEMENT AND PROBABILITY

Sort, Classify, Represent and Compare Objects Using a Variety of Attributes



Grade level  
Kindergarten

Strand

Book title



# K/E

# SORT, CLASSIFY, REPRESENT AND COMPARE OBJECTS USING A VARIETY OF ATTRIBUTES

## Student Activities

### Sort, classify and represent groups of objects by category

Relate each group to its category.....	1
Relate each category to its corresponding group.....	2
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Relate each group to its representation on a pictograph.....	7
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Connect each group to its corresponding colour.....	
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The title of the resource relates to an Overall Expectation of the Math Curriculum.



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



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



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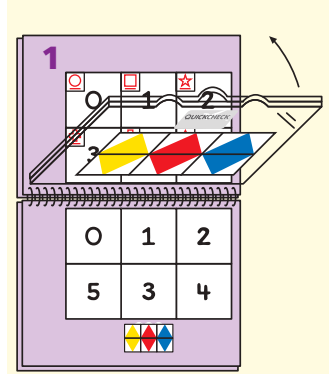
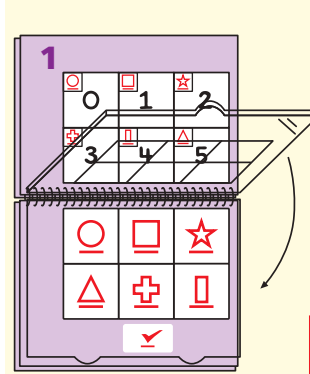
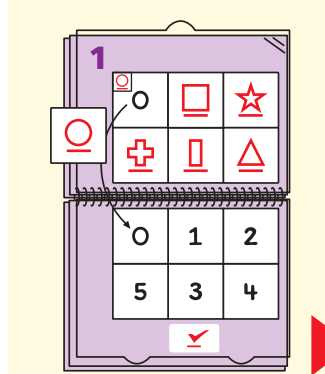
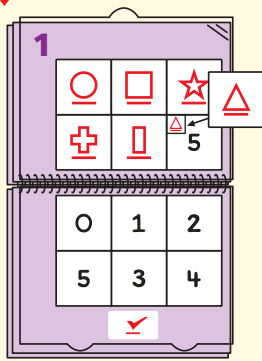
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How to use



### GETTING READY TO USE QUICKCHECK

You need a Student Resource and a case with six tiles



- Open the Student Resource to Activity 1.
- Put the empty tile case over the Student Resource.
- 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.

• Watch students using QUICKCHECK Math on our website at [www.ebbp.ca](http://www.ebbp.ca). Click on QUICKCHECK Math in Motion.



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



# 1

## Relate each group to its category.

■ This activity is the first in a series of five that deal with sorting objects according to their category.

The activity extension provides new information for teachers or, ideas for further development of the activity.



The activity title states the targeted learning outcome: Teachers know the purpose of the activity at a glance.




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




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



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.



If ■ appears below the activity title:

Educators will then find new information or ideas for further development of the activity.

+ 23 activities



## How to Use QUICKCHECK Math

1. Use QUICKCHECK Math with your students whenever you would normally use a worksheet or workbook.
  - Use it at any point in your math lesson:
    - Before/getting started
    - During/working on it
    - After/practice and consolidation.
  - You can use QUICKCHECK Math as a small group or guided activity, in pairs to promote discussion, or as an independent activity in a Math Centre.

2. Use QUICKCHECK Math as an

The Student Activities found on the cover list learning outcomes that will help target specific concepts for **diagnostic** or **formative** assessment purposes.

This Student Resource is used in conjunction with the QUICKCHECK Math Kindergarten Ongoing Assessment Teacher Resource.

### Activity Extension:

#### If ■ appears below the activity title:

Educators will then find new information or ideas for further development of the activity.

### Tips for Success

Review “Getting Ready to Use QUICKCHECK” on the first page of this book.

The CHECKMARK ✓ at the bottom of the plastic tile case shows students how to orient the case as they place it on the book on top of each activity.

To teach your students how to use QUICKCHECK Math, try a three-step approach.

1. **Match:** Place all the tiles in the top grid by matching icons.
2. **Think and Play:** Lift each tile to reveal the image beneath and then transfer the tile to the corresponding image in the lower grid.

3. **Check:** Close the case cover. Flip the case up and check that the tile pattern matches the answer key.

When information appears below the title of an activity, use it to guide instruction and discussion, or to provide a hands-on extension of the activity.

Fold the Student Resource in half or stand it up and use the visual information as the stimulus for activities you create on your own.

See  
Activity 8



Additional proposals  
for the teacher



## LEARNING CONNECTION ACTIVITY SUGGESTIONS

### Mathematical Process Expectations:

#### Representing, Reasoning and Proving, Connecting

##### Sort and classify objects using one attribute

**Small group guided Math activity:** Using a sorting mat or two hoops from a selected group of bin toys in the classroom (e.g. vehicles, animal toys) use one attribute, then another. Animal example: Say: “Soon, we are going to the zoo. I want to know how many farm animals and how many zoo animals are there. Using the sorting mat, can you find out how many farm animals we have? Prove it/show me.”

Say: “Now that you’ve found all the farm animals, can you sort them? How many sorting rule did you use?” Students may sort them by animal type, by colour or by size. You may also want to suggest two ways, from which they may choose one.

These learning connection activity 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.



##### Sort, classify and represent objects using one attribute

**Idea:** When beginning your unit on Data Management representations, take a picture of each of your students and glue/tape each one onto a smooth metal frozen juice lid. Then, place a piece of magnetic tape on the back; you have a set of round magnetic pictures of your class. Make a grid or axis on a metal chart board using a dry erase marker or tape. This is great for data work and very interactive for students—not to mention easy to manipulate.

**Large group Math activity** (after students have had experience with different ways to represent data): Say: “I am going to sing a colour song/chant a colour poem. Listen to my song/chant. If you are wearing a shirt of the colour I sing/chant about, stand up. Red, red, red, red, who is wearing red today? (Note: if you think it would benefit some of your students, hold up a piece of red construction paper while you sing/chant). Thank you. Sit down please. Listen again: Blue, blue, blue, blue, who is wearing blue today? Thank you. Sit down please. I wonder, are there more children wearing red or blue shirts today? How can we find out?” Note: If the students wear uniforms, use another attribute, like hair colour.



Have each group stand up again and ask students to count the number of students in each group. Use a T-chart with shirt outlines coloured red or blue as headings to record the totals. Say: “Are more children wearing blue or red shirts today? How do you know?” Listen to a variety of responses from your students. Say: “In smaller groups, let’s make some representations of what we have found.” Have centres around the room, have different materials for students to make their representations. Review with your students what their choices are and what is expected in each centre (you may want to show them some samples). Let them know that you will ask them to bring their representations back to the large group to talk about them. Have adults or older students available to help at each centre. Here are three examples to get you started, but there are many other ways:

**Connecting Cube Tower Representation Centre:** Students count the correct number of red and blue connecting cubes to represent the number of students wearing red shirts and the number of students wearing blue shirts. Then, they make two towers out of the cubes they counted and compare them.

**Link Chains Representation Centre:** Students count the correct number of red and blue links to represent the number of students wearing red shirts and blue shirts. Then, they make two chains out of the links they counted and compare them.

**Sorting Mat Representation Centre:** Students work together and sort shirt cutouts or stickers of the two colours of shirts on either side of the sorting mat.

When you bring the large group back together, ask students to share their representations. While you are reflecting and connecting, you might want to ask:

- How is your representation the same as another student’s and how is it different?
- Is it easier to get information from your representation or from our groups of people at the beginning? Why?



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Credits page



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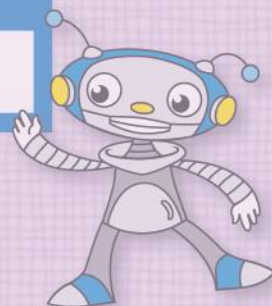
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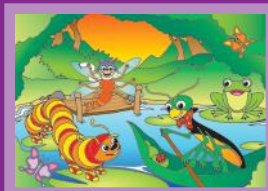


The 5 mathematical strands for the Kindergarten level



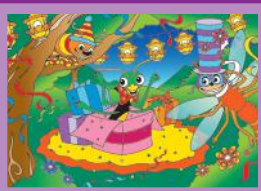
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Understanding Quantity and Number Relationships



**MEASUREMENT**

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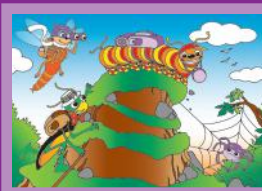
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**PATTERNING**

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