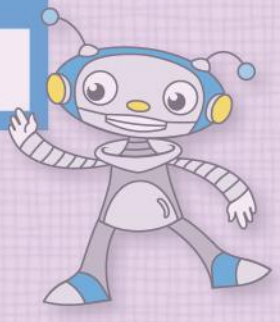
QUICKCHECK™ MATH



DATA MANAGEMENT AND PROBABILITY

Read and Describe Data Presented in Tally Charts, Pictographs, Line Plots and Bar Graphs

QUICKCHECK™ MATH

Book title

KINESIS EDUCATION

Strand

KINESIS EDUCATION

Grade level
Grade 2

KINESIS EDUCATION

K/E

READ AND DESCRIBE DATA PRESENTED IN TALLY CHARTS, PICTOGRAPHS, LINE PLOTS AND BAR GRAPHS

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

Student Activities

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.

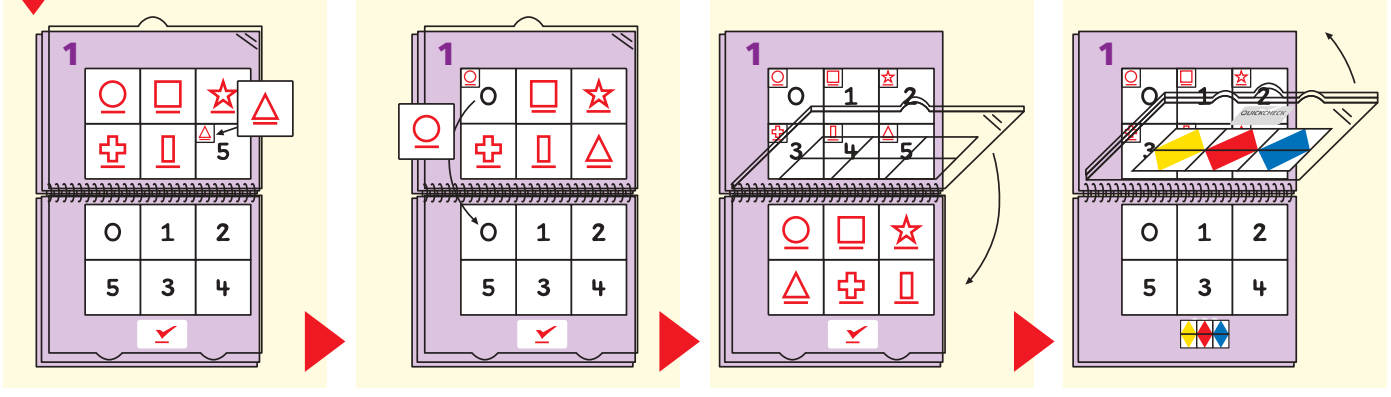
Teacher Section

How to use

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

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. Click on *QUICKCHECK Math in Motion.***

2

Connect each group of objects to its sorted groups. Objects are sorted by two attributes.

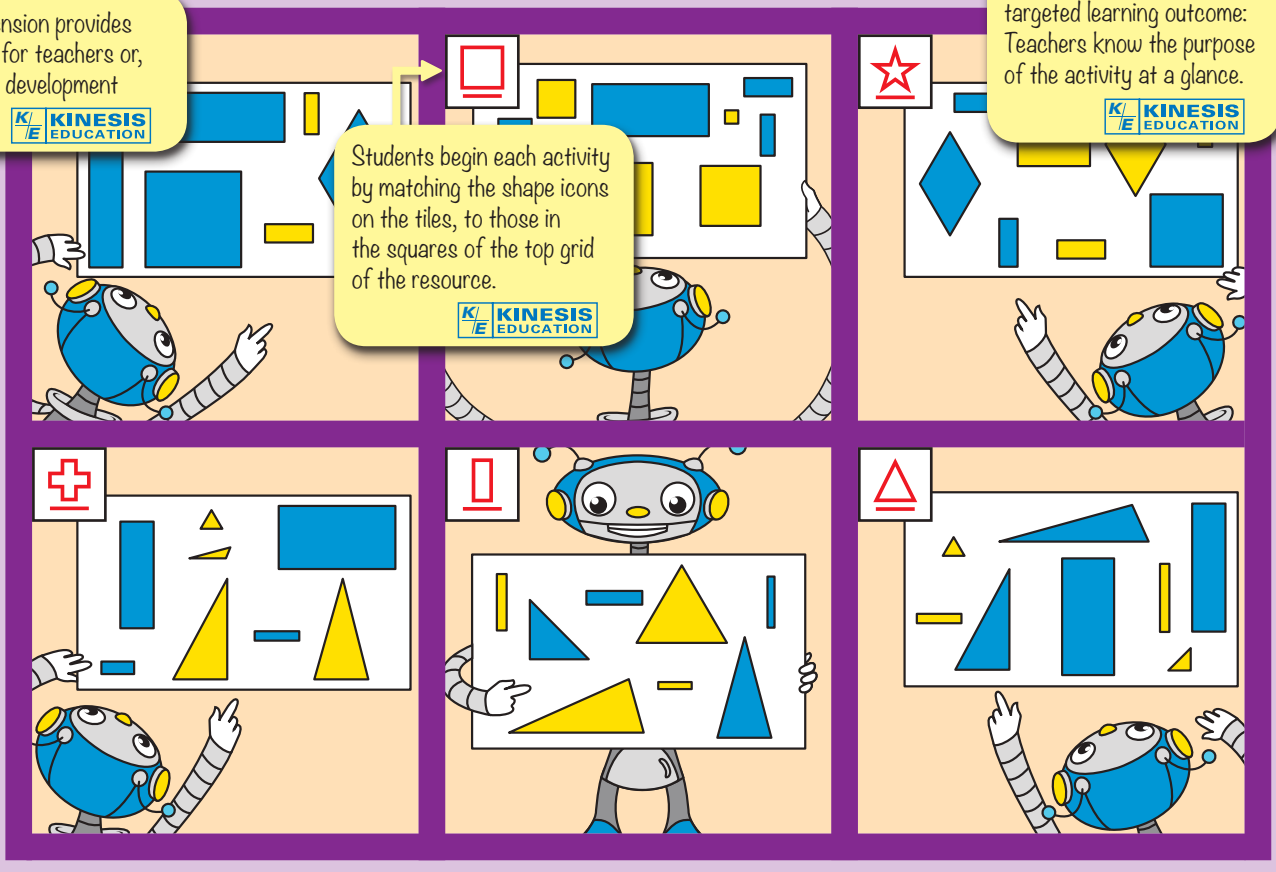
■ This activity is the first of five that deal with sorting and classifying objects using two attributes simultaneously.

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

KINESIS EDUCATION

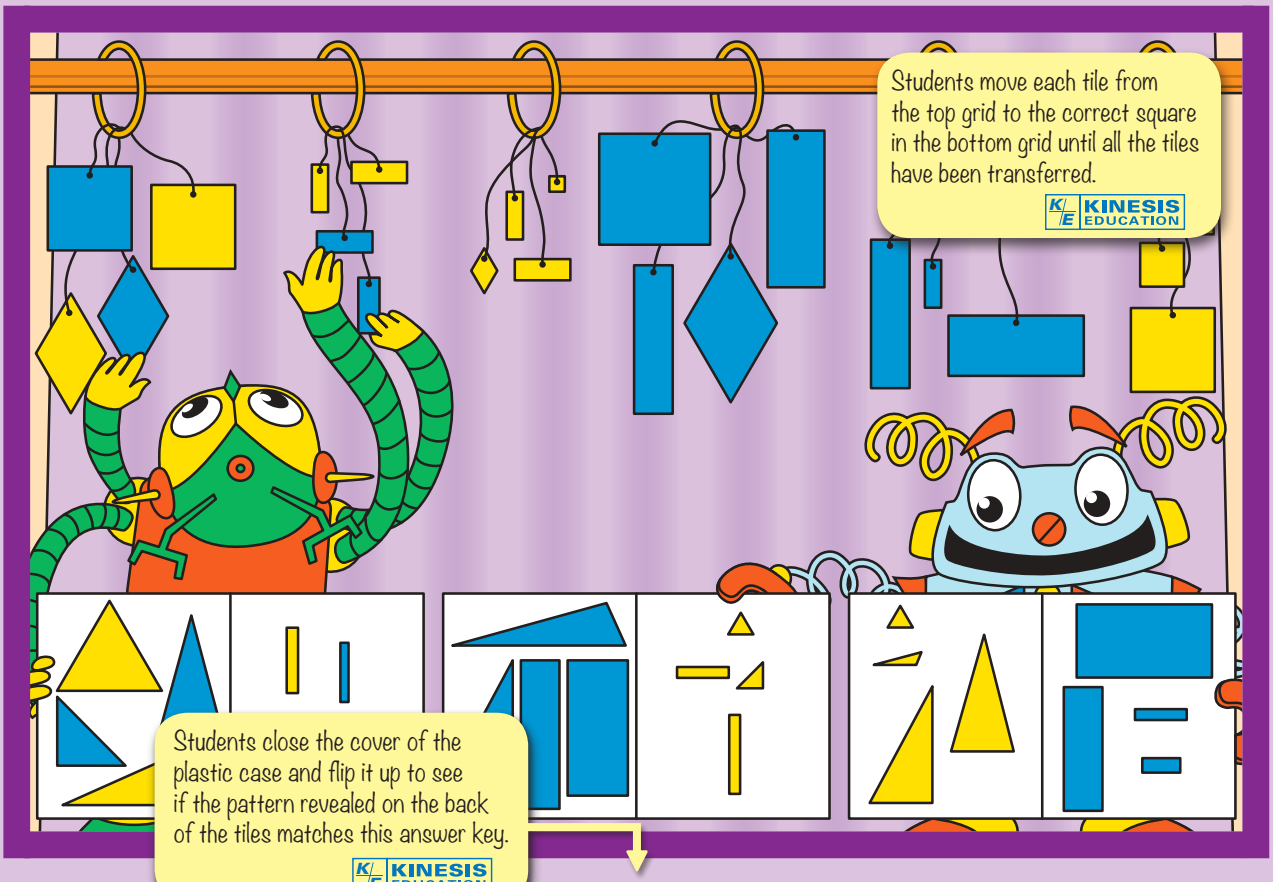
The activity title states the targeted learning outcome: Teachers know the purpose of the activity at a glance.

KINESIS EDUCATION



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

KINESIS EDUCATION

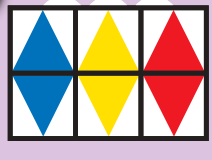


Students move each tile from the top grid to the correct square in the bottom grid until all the tiles have been transferred.

KINESIS EDUCATION

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.

KINESIS EDUCATION



If ■ appears below the activity title:

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

+ 23 activities

KINESIS EDUCATION

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 a

The Student Activities found on
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 Grade 2 Ongoing Assessment Teacher Resource.

Additional proposals for the teacher

KINESIS EDUCATION

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 11

LEARNING CONNECTION ACTIVITY SUGGESTIONS

Mathematical Process Expectations: Reasoning and Proving, Connecting, Representing

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.

KINESIS EDUCATION

Sort and classify objects using two attributes simultaneously

Put on a piece of music that all your students know. In small groups of 4 have your students determine a way to mark the beat by clapping, patti Stop the music. Now ask your students to sort themselves by boy or girl a to mark the beat and then play the piece a second time. Finally, have stu boy or girl, same hair colour and the common way they mark the beat. F "What was the difference between the size of the groups the second ti and the third time? What is the reason for this change?"

Read data presented in pictographs, bar graphs, line plots and other graphic organizers

As a class, brainstorm questions that are of interest to the whole group and that can be easily answered by the students in only a few different ways, such as their favourite season, favourite things to do at recess, the season with the most student birthdays in the class, etc.

Once a question has been chosen, have a small group determine a selection of probable answers and survey classmates, tracking the responses using a tally chart.

The rest of the students will be divided into groups of four and will be responsible for representing the data collected by the first group in a designated graphing format: line plot, simple bar graph, pictograph or diagram. Make sure that the groups give their graphs a title and that the x- and y-axes are labelled appropriately.

TEACHER SECTION

Distinguish between numbers that represent data values and numbers that represent the frequency of an event

For one month, have your class monitor the daily forecasted temperature highs. To do this, try using your local weather station's website or your newspaper.
The temperatures can be recorded on a clip board, class calendar or spreadsheet.
Once the data is complete, plot the data values (range of temperatures) on the x axis using horizontal chart paper. Then plot the frequency of occurrence of each temperature using a line plot format.
Ask students to find the data values (temperatures) that occurred most often that month.
Now ask a question about frequency of occurrence: "How many days did we record that temperature this month?"

Demonstrate understanding of data presented in graphs by comparing parts of the data with the whole

Using the data represented in one of the graphs above, have students on their own or with a partner write three comparative statements about parts of the data as they relate to each other or as they relate to the whole. Using number sentences or open number lines, have them prove or disprove each of their statements.

Canada

We acknowledge the financial support of the government of Canada, for our publishing activities.

Credits page

KINESIS EDUCATION

AUTHOR KELLY DIXON *PRODUCT DEVELOPMENT* KELLY DIXON, PAUL KNOX, MARYLYNNE MESCHINO
CASE & TILES AND BOOKS — CONCEPT AND DESIGN BERTHELAC *EDITOR* MARYLYNNE MESCHINO
TEACHER REVIEWERS JOANNE BLACKBURN, OTTAWA CATHOLIC DISTRICT SCHOOL BOARD; SUZANNE FOX, THAMES VALLEY DISTRICT SCHOOL BOARD
COVER DESIGN MIKE LAJEUNESSE *ILLUSTRATIONS* JEAN-SÉBASTIEN LAJEUNESSE *BOOK LAYOUT* SAMIA HERRERA,
PROOFREADER JILLIAN SWAN *EDITORIAL ASSISTANT AND PRODUCTION MANAGER* FRANCINE PLANTE
COMPUTER GRAPHICS JOSIANE DUQUETTE, FRANCISCA MARTINEZ GALVEZ, VALÉRIE TARDIF *PRINTING* SPRINTMÉDIA, JANUARY 2021
EXECUTIVE PUBLISHER PAUL BEULLAC/LES ÉDITIONS JULES CHÂTELAIN

www.ebbp.ca

Legal Deposit — Library and Archives Canada, 2011 + Bibliothèque et Archives nationales du Québec, 2011
ISBN 978-2-7615-0490-4 (2nd edition, 2011)
ISBN 978-2-7615-0308-2 (1st edition, 2010)

The 5 mathematical strands for the Grade 2 level

KINESIS EDUCATION

QUICKCHECK MATH

NUMBER SENSE AND NUMERATION

Solve Addition and Subtraction Problems of One and Two-Digit Whole Numbers and Explore Multiplication and Division

MEASUREMENT

Compare, Describe and Order Objects and Time Using Measurable Attributes

GEOMETRY AND SPATIAL SENSE

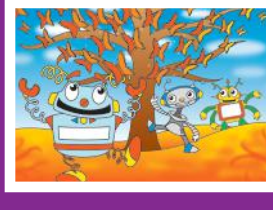
Compose and Decompose Shapes and Figures

PATTERNING AND ALGEBRA

Identify, Describe and Extend Repeating, Growing and Shrinking Patterns

DATA MANAGEMENT AND PROBABILITY

Read and Describe Data Presented in Tally Charts, Pictographs, Line Plots and Bar Graphs



ORDER THE COMPLETE GRADE 2 PACKAGE
ISBN 978-2-7615-0303-7
Product No. 400 1145

ISBN 978-2-7615-0490-4

KINESIS EDUCATION
www.ebbp.ca

Grade level
Grade 2
KINESIS EDUCATION

404 0317
Printed in Canada