1

Grade level
Grade 1

KINESIS EDUCATION

GRADE 1

QUICKCHECK™ MATH

DIAGNOSTIC ASSESSMENT

EXCERPT

TEACHER RESOURCE

Assessment questions or tasks are provided for all 5 strands

KINESIS EDUCATION

- Number Sense and Numeration
- Measurement
- Geometry and Spatial Sense
- Patterning
- Data Management and Probability

Kelly Dixon

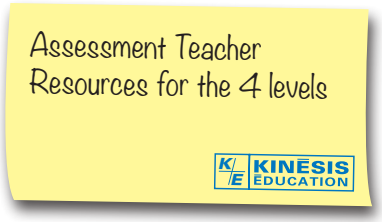
K/E

QUICKCHECK™ MATH

DIAGNOSTIC ASSESSMENT TEACHER RESOURCE

QUICKCHECK MATH ASSESSMENT TEACHER AND STUDENT RESOURCES

Assessment Teacher Resources (ATR) Packages	Product Number	ISBN
■ Kindergarten Ongoing ATR Grade Package	404 1109	978-2-7615-0459-1
■ **Diagnostic and Ongoing ATR Grade 1 Package**	**404 0762**	**978-2-7615-0442-3**
■ Diagnostic and Ongoing ATR Grade 2 Package	404 0770	978-2-7615-0448-5
■ Diagnostic and Ongoing ATR Grade 3 Package	404 1216	978-2-7615-0454-6



The following packages are available for those who have already purchased an Instructional Student Resource Grade Package (books and cases).

Teacher and Student ATR Grade Add-On Package	Product Number	ISBN
■ Kindergarten Ongoing ATR Add-On Package	404 1125	978-2-7615-0460-7
■ **Diagnostic and Ongoing ATR Grade 1 Add-On Package**	**404 0721**	**978-2-7615-0441-6**
■ Diagnostic and Ongoing ATR Grade 2 Add-On Package	404 0739	978-2-7615-0447-8
■ Diagnostic and Ongoing ATR Grade 3 Add-On Package	404 1232	978-2-7615-0453-9

THREE EASY WAYS TO ORDER!

Tel.: 1 888 532-9466 Email: editions@ebbp.ca Fax: 1 866 988-5929

OR VISIT US AT www.ebbp.ca

1

GRADE 1

QUICKCHECK™ MATH

DIAGNOSTIC ASSESSMENT

TEACHER RESOURCE

Grade level
Grade 1

KINESIS EDUCATION

Assessment questions or tasks are provided for all 5 strands

KINESIS EDUCATION

- Number Sense and Numeration
- Measurement
- Geometry and Spatial Sense
- Patterning
- Data Management and Probability

Kelly Dixon

K/E

First Edition 2012

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

Author	Kelly Dixon
Piloting development	Kelly Dixon
	Paul Knox
Case, tiles, and books — concept and design	Berthelac
Editor of the Student Resources	Marylynne Meschino
Teacher reviewers of the Student Resources	Joanne Blackburn
	Ottawa Catholic District School Board
	Jenine Calder
	Durham Catholic District School Board
	Suzanne Fox
	Thames Valley District School Board
Cover design and illustrations	Mike Lajeunesse
Book layout	Berthelac
	Josiane Duquette
	Samia Herrera
Data processing and computer graphics	Josiane Duquette
	Samia Herrera
	Mathieu Ly
	Valérie Tardif
Proofreader	Jillian Swan
Production supervisor	Francine Plante
Production assistant	Josiane Duquette

Credits page

KINESIS EDUCATION

Executive publisher	Paul Beullac
	Jules Châtelain Publishing

www.ebbp.ca

Legal Deposit — Library and Archives Canada, 2012 + Bibliothèque et Archives nationales du Québec, 2012
ISBN 978-2-7615-0444-7

A WORD TO TEACHERS

As teachers, we want each of our students to **get** what we are teaching. Often, our hope is to have students **get there** as quickly and as best as they can. Although the goal of achieving curriculum expectations is common for all students, the starting points and routes in reaching this goal differ widely. In our work to enable students to achieve the common goal, it is important to be explicit in our assessment and instruction.

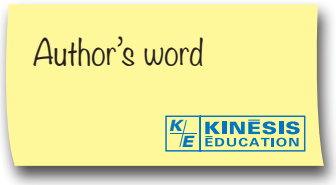
How do we do this? We need to assess our students at the beginning and throughout the learning cycle so we can provide them with ongoing, specific feedback and guidance for growth. Some of the most effective ways to do this with young children are in individual or small group assessment contexts, and through observations and teacher-student conferences.

This *QUICKCHECK Math Diagnostic Assessment Teacher Resource* provides *diagnostic* assessment activities for all five strands of the mathematics curriculum. It offers guidance and structure in an easy-to-use format for student-teacher assessment conferences, either with individuals or small groups of students. This Assessment Resource provides a variety of opportunities for students to demonstrate their learning. Every assessment activity uses open questions and tasks that allow for a range of student responses and that reveal student strategies and thinking. *What to Look For* sections help make connections between assessment observations and curriculum expectations. These connections are particularly useful when providing students and parents with specific feedback on growth and on next steps.

The format of the *QUICKCHECK Math Diagnostic Assessment Teacher Resource* is open and flexible. There is no need to do all the assessment activities in each strand section. We have provided a number of choices for activities that assess similar concepts and skills; it is entirely your decision as to which activities you choose to use to assess your students. You decide how often you need to assess your students and whether or not you will assess them individually or in small groups. *Student Observation Sheets* for each activity are offered as an option for recording your assessment observations. These reproducible sheets are found at the end of each section when required.

We are indebted to the teachers of the Toronto District School Board who piloted these Assessment Resources and whose feedback was essential to the development of their final forms.

Kelly Dixon



CONTENTS

QUICKCHECK MATH DIAGNOSTIC ASSESSMENT TEACHER RESOURCE

Table of contents for the Diagnostic Assessment Teacher Resource

KINĒSIS EDUCATION

Number Sense and Numeration

Measurement

Geometry and Spatial Sense

Patterning

Data Management and Probability

PART OF THE CONTENTS INCLUDED IN THIS EXCERPT

Table of contents for the Excerpt

KINESIS EDUCATION

Number Sense and Numeration

Geometry and Spatial Sense

GATHER THE FOLLOWING FOR YOUR ASSESSMENT

Gather the following before you begin your assessment:

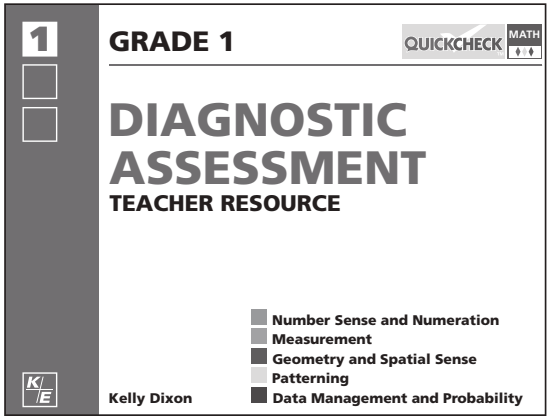
1. Assessment Teacher Resource
2. Select the activity in the Student Resource
3. Manipulatives and *Templates
4. Diagnostic Student Observation Sheets

*Reproducible templates provided

KINESIS EDUCATION

Assessment Teacher Resource

☑ Choose an assessment activity from any of the math strand sections containe

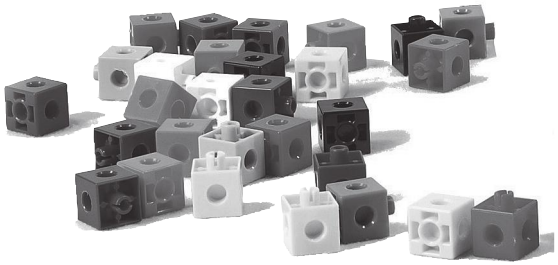


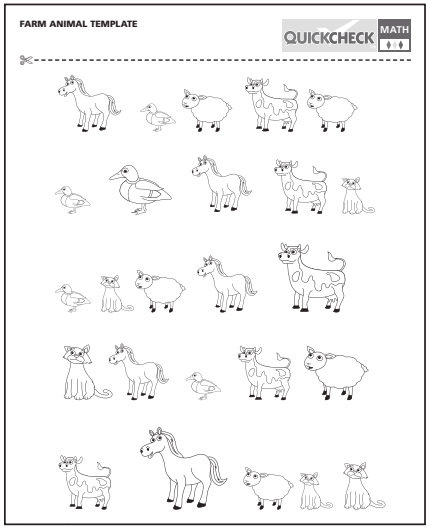
Instructional Student Resources Packages

☑ Select the activity in the Student Resource that corresponds to the assessment activity you chose from the *Diagnostic Assessment Teacher Resource*.

+ Manipulatives and Templates

☑ Gather the recommended manipulatives and templates* suggested in the assessment activity.

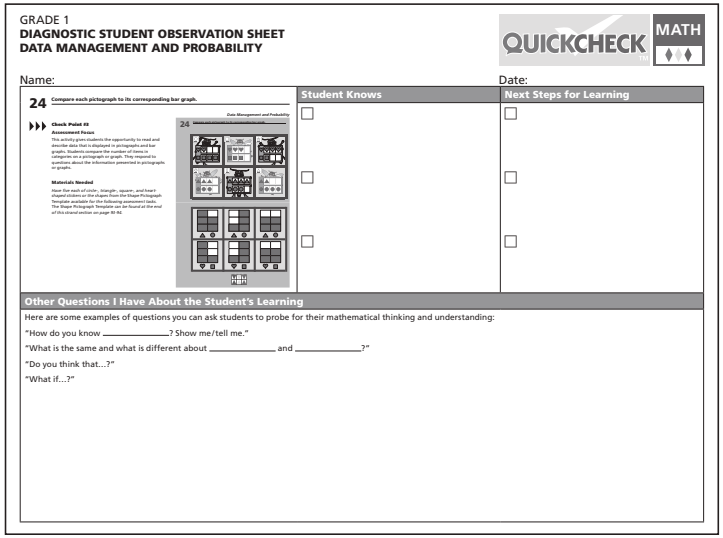




** Templates can be found at the end of a strand section where required. See pages 25, 26, 27, 47, 61, 91, 92, 93, and 94.*

+ Diagnostic Student Observation Sheets

☑ Use your own method for recording your observations or photocopy the corresponding Student Observation Sheet found at the end of each strand section.



GRADE 1
DIAGNOSTIC STUDENT OBSERVATION SHEET
DATA MANAGEMENT AND PROBABILITY

QUICKCHECK MATH

Name: Date:

24 Compare each pictograph to its corresponding bar graph.	Student Knows	Next Steps for Learning
	☐	☐
	☐	☐
	☐	☐

Other Questions I Have About the Student's Learning

Here are some examples of questions you can ask students to probe for their mathematical thinking and understanding:

"How do you know _____? Show me/tell me."

"What is the same and what is different about _____ and _____?"

"Do you think that...?"

"What if...?"

QUICKCHECK MATH DIAGNOSTIC ASSESSMENT TEACHER RESOURCE IN THREE EASY ST

1. Assessment activities are organized by strand and are designed to be used with individual or small groups of students. The **Check Point assessment activities** in this book have been designed for diagnostic assessment and are appropriate for use **prior to** a cycle of learning.
2. Use any of the **Check Point assessment activities** depending on your purpose and the needs of your students. The *What to Look For* section helps you discover what your students know and what they need to learn. The *What to Look For* section focuses on student thinking and strategies. If you need a system for recording your assessment observations, copy the Student Observation Sheet that corresponds to the assessment activity you have selected. Student Observation Sheets for each activity can be found at the end of each strand section.
3. Prior to using a **Check Point assessment activity**, gather the suggested manipulatives and have students complete the corresponding activity in their *QUICKCHECK Math Student Resource*.

The responses that you observe from students through these assessment activities will help you:

- Gather useful information for **reporting and interviewing purposes**
- Pinpoint specific areas for future **math instruction**.

CHECK POINT ACTIVITIES

DIAGNOSTIC ASSESSMENT

NUMBER SENSE AND NUMERATION

QUICKCHECK™ MATH

Activity book chosen for this Excerpt:
Number Sense and Numeration

K/E KINESIS EDUCATION

15 Compare each composition of 5 to its corresponding decomposition.

This **number** and **heading** relate to the same number in the Student Resource.

KINESIS EDUCATION

Check Point #4

The **Check Point assessment activities** in this book have been designed for diagnostic assessment and are appropriate for use **prior to** a cycle of learning.

KINESIS EDUCATION

ts the opportunity to compose variety of ways. Students make g connecting cubes. Students also fewer, or the sa items. A five frame is introduced. What s students use to complete the assessment

Outlines the content to be assessed and often strategies to look for.

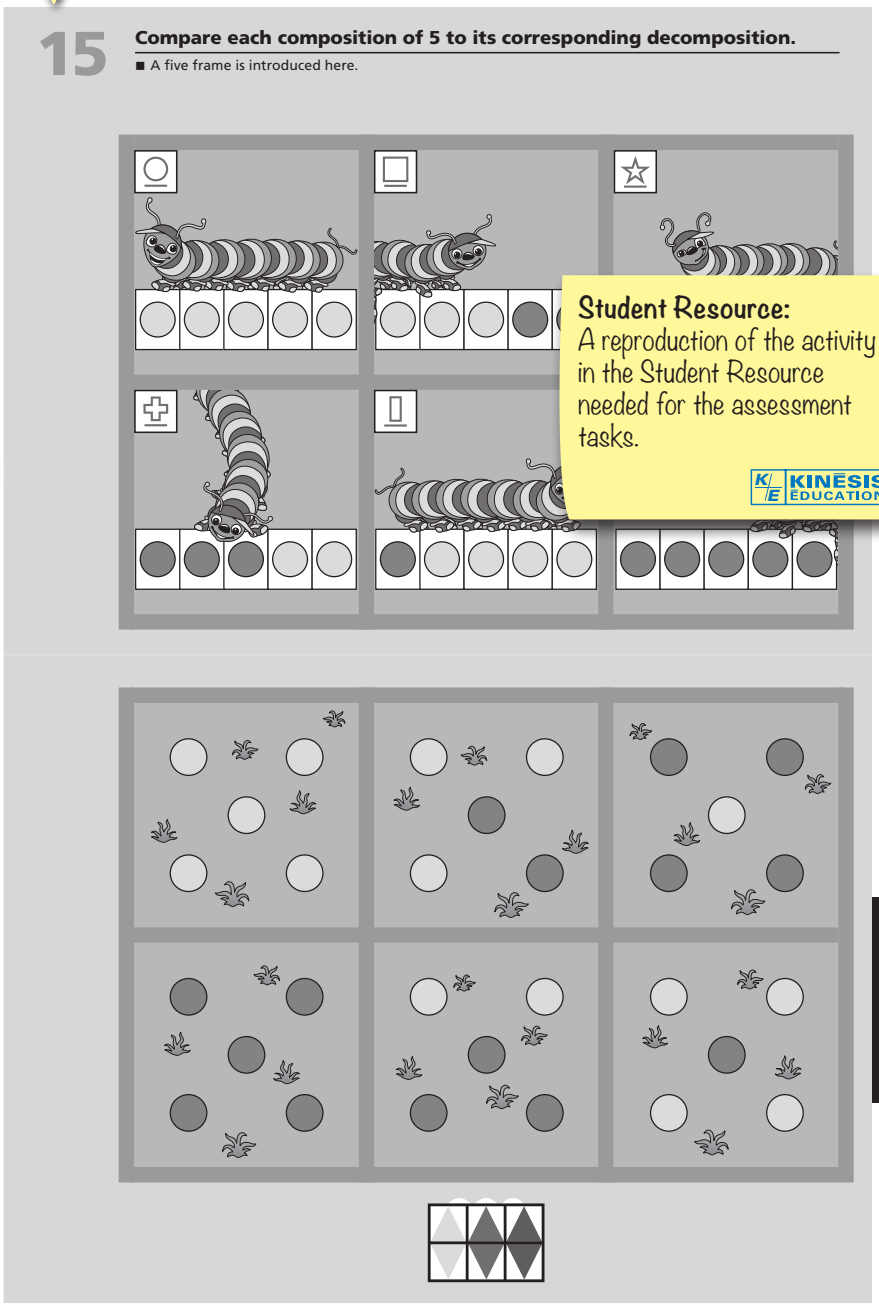
KINESIS EDUCATION

Materials Needed

Have two-colour counters, a tin can, connecting cubes, and a five frame available for the following assessment tasks. Note: Two-colour counters can be made using quarters. Put a red circle sticker on one side and a yellow circle sticker on the other side.

Lists the manipulatives and templates needed for the particular assessment activity.

KINESIS EDUCATION



Student Resource: A reproduction of the activity in the Student Resource needed for the assessment tasks.

KINESIS EDUCATION

Question/Task	What To Look For
nts only look at the top grid of their source. t do you notice about all of the five nts 10 two-colour counters and a tin can. t five counters and put them in the tin can." Say: "Now, we are going to shake the tin and dump out all the counters. How many will fall out?" Say: "Dump out all the counters. What do you notice? How many red; how many yellow; how many altogether?" Say: "Use yellow and red connecting cubes to make five in the same way. Can you make five with the two colours in a different way? Show me."	■ "They are all full; they all have f different ways; different numbe counters make five." ■ Students count five counters one by one, or take an amount and count on from there, e.g., they take two and then count "three, four, five." ■ Students use their own words to say that they counted five counters and put them into the can. They recognize that shaking or dumping the counters out won't change the number of counters (number conservation). ■ E.g.: "Some are red and some are yellow; there is more of one colour than the other; there are still five counters." ■ Students use one-to-one correspondence, or select correctly by subitizing to compose five in the same way as the counters. Do they compose five in a different way?

Question/Task:
Open questions and tasks allow for a range of appropriate student responses and help reveal student strategies and thinking.
*Choose which tasks and questions suit your purposes the best. There is no need to do them all.

KINESIS EDUCATION

What to Look For:
Defines a range of appropriate responses and strategies to help you make connections between your observations and curriculum expectations.

KINESIS EDUCATION

24 Relate each number to the anchor of 10 on a number line.

This **number** and **heading** relate to the same number in the Student Resource.

KINESIS EDUCATION

Check Point #7

The **Check Point assessment activities** in this book have been designed for diagnostic assessment and are appropriate for use **prior to** a cycle of learning.

KINESIS EDUCATION

ts the opportunity to relate
f 10. Students use the strategies
from 10. Students understand
vard (right) on
the numbers become greater and when
backward (left), numbers become less. V
do they use to complete the assessment

Outlines the content to be assessed and often strategies to look for.

KINESIS EDUCATION

Materials Needed

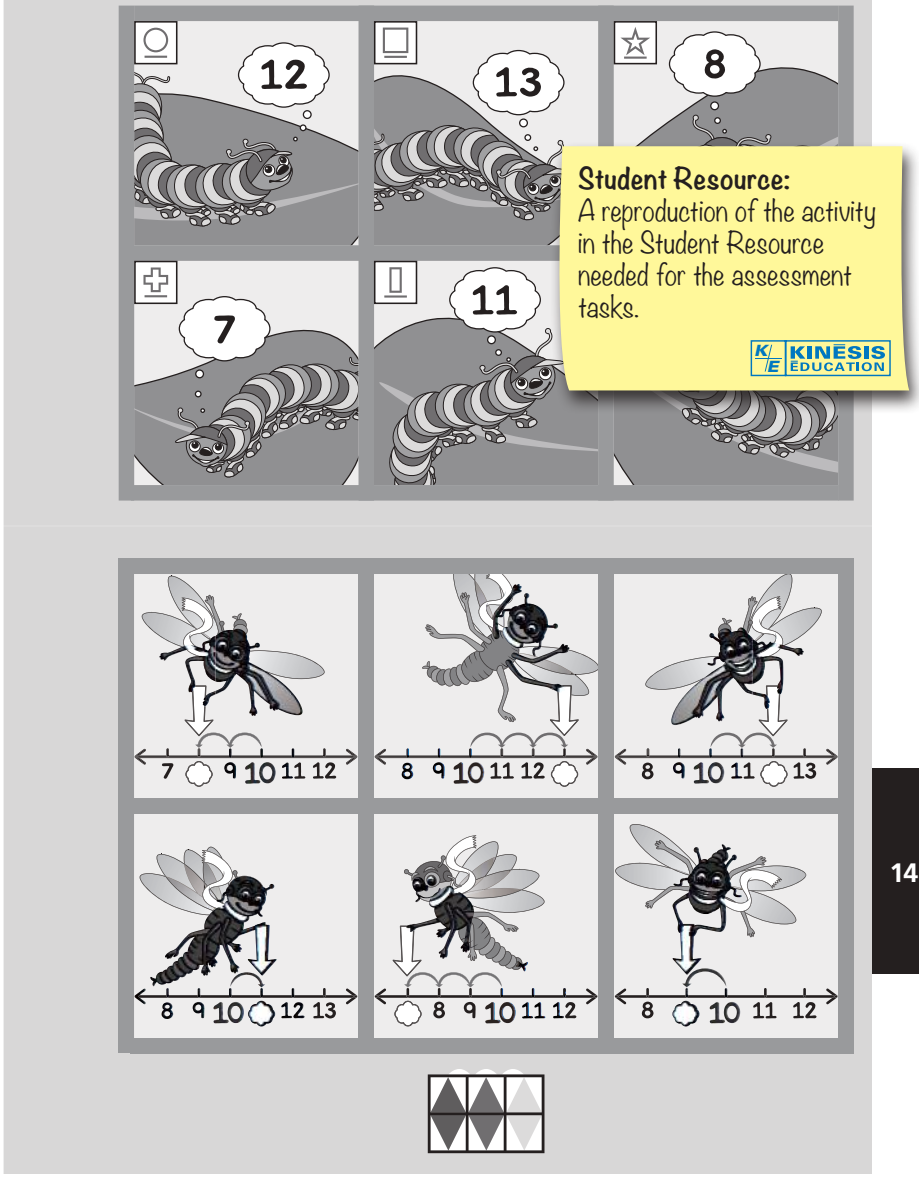
Have a Number Line Template *showing 10 as the anchor number and a pencil available for the following assessment tasks. You can find the reproducible* Anchor Ten Number Line Template *at the end of this Number Sense and Numeration section (p. 27).*

Lists the manipulatives and templates needed for the particular assessment activity.

KINESIS EDUCATION

* Reproducible templates can be found at the end of this section.

KINESIS EDUCATION



Student Resource: A reproduction of the activity in the Student Resource needed for the assessment tasks.

KINESIS EDUCATION

Question/Task	What To Look For
nts only look at the bottom grid of their source. to the number line that shows a cloud that ne more. How do you know?" h number is it? How did you figure that questions above with two other numbers. Make sure that you use one example that asks students to find a number line that has a cloud at a number fewer than 10.	■ Students point to the number li square. ■ Students may use one of the fol — Pointing to the numbers on t and counting out loud from l e.g.: "8, 9, 10, 11." — Pointing to 10 and then moving their finger one to the right, saying, "10, "11." — Saying, "10 and one more is 11."
2. Have the *Number Line Template* and a pencil available for the following activity. Ask: "What number do you see on the number line? Where would a number that is fewer than 10 go? What number would it be? Put it on the number line." Repeat the above with a number that is more than 10.	■ Do students point to a spot to the left of 10? Do they use the notches on the number line to help them count back one-to-one from 10? Do students write the numerals less than 10 correctly on the number line?

Question/Task:
Open questions and tasks allow for a range of appropriate student responses and help reveal student strategies and thinking.
*Choose which tasks and questions suit your purposes the best. There is no need to do them all.

K/E KINESIS EDUCATION

What to Look For:
Defines a range of appropriate responses and strategies to help you make connections between your observations and curriculum expectations.

K/E KINESIS EDUCATION

DIAGNOSTIC

QUICKCHECK™ MATH

STUDENT OBSERVATION SHEETS

NUMBER SENSE AND NUMERATION

GRADE 1

DIAGNOSTIC STUDENT OBSERVATION SHEET
NUMBER SENSE AND NUMERATION

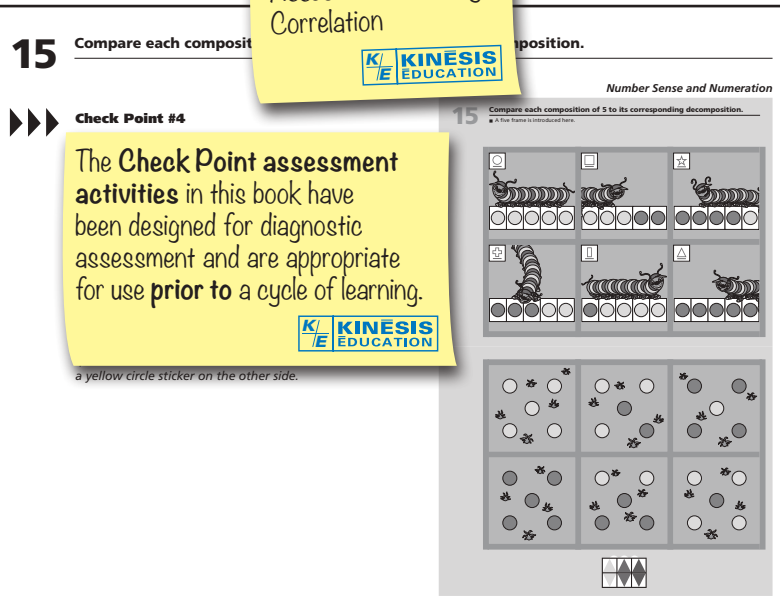
QUICKCHECK MATH

Name:

Date:

Assessment Activity Correlation

KINESIS EDUCATION


15 Compare each composit ...position.

Number Sense and Numeration

15 Compare each composition of 5 to its corresponding decomposition.

A five frame is introduced here.

Check Point #4

The **Check Point assessment activities** in this book have been designed for diagnostic assessment and are appropriate for use **prior to** a cycle of learning.

KINESIS EDUCATION

a yellow circle sticker on the other side.

Student Knows

- ☐
- ☐
- ☐

Prior to the assessment list the appropriate knowledge, skills and strategies to look for during the assessment.
For guidance with identifying these, use the **Assessment Focus** and **What to Look For** sections from the specific assessment activity you choose. Your curriculum documents are excellent sources as well.

Check the appropriate boxes as you observe and listen to student responses during the assessment.

KINESIS EDUCATION

Next Steps for Learning

- ☐
- ☐
- ☐

Prior to the assessment list the same knowledge, skills and strategies here as you listed in the Student Knows column. Check the appropriate boxes as you observe and listen to student responses during the assessment.

KINESIS EDUCATION

Other Questions I Have About the Student's Learning

Here are some examples of questions you can ask students to probe for their mathematical thinking and understanding:

"How do you know _____? Show me/tell me."

"What is the same and what is different about _____ and _____?"

"Do you think that...?"

"What if...?"

Your assessment observations may bring up further questions about your student's learning. If so, record them here. You may find some of the open questions provided here helpful as you probe further for mathematical thinking and understanding.

KINESIS EDUCATION

GRADE 1

DIAGNOSTIC STUDENT OBSERVATION SHEET
NUMBER SENSE AND NUMERATION

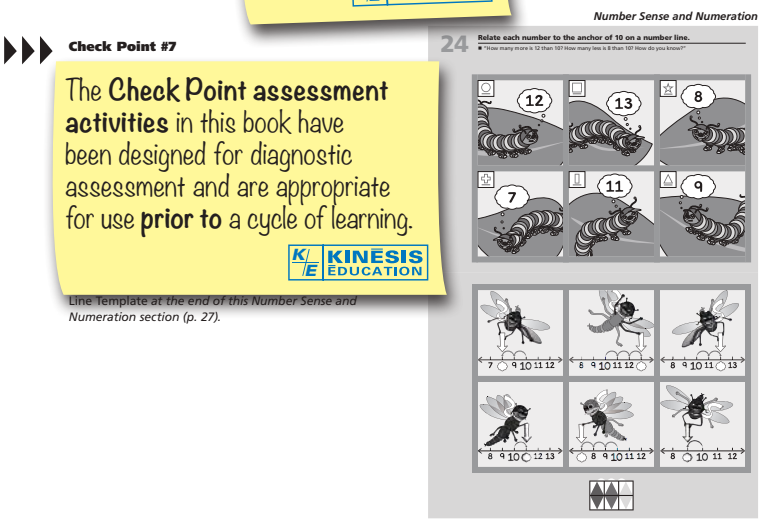
QUICKCHECK MATH

Name:

Date:

Assessment Activity Correlation

KINESIS EDUCATION



The **Check Point assessment activities** in this book have been designed for diagnostic assessment and are appropriate for use **prior to** a cycle of learning.

KINESIS EDUCATION

Student Knows

- ☐
- ☐
- ☐

Prior to the assessment list the appropriate knowledge, skills and strategies to look for during the assessment.
For guidance with identifying these, use the **Assessment Focus** and **What to Look For** sections from the specific assessment activity you choose. Your curriculum documents are excellent sources as well.

Check the appropriate boxes as you observe and listen to student responses during the assessment.

KINESIS EDUCATION

Next Steps for Learning

- ☐
- ☐
- ☐

Prior to the assessment list the same knowledge, skills and strategies here as you listed in the Student Knows column. Check the appropriate boxes as you observe and listen to student responses during the assessment.

KINESIS EDUCATION

Other Questions I Have About the Student's Learning

Here are some examples of questions you can ask students to probe for their mathematical thinking and understanding:

"How do you know _____? Show me/tell me."

"What is the same and what is different about _____ and _____?"

"Do you think that...?"

"What if...?"

Your assessment observations may bring up further questions about your student's learning. If so, record them here. You may find some of the open questions provided here helpful as you probe further for mathematical thinking and understanding.

KINESIS EDUCATION

ANCHOR TEN NUMBER LINE TEMPLATE

10

10

10

10

TEACHER NOTES

Additional page
to enter your notes

KINESIS EDUCATION

CHECK POINT ACTIVITIES

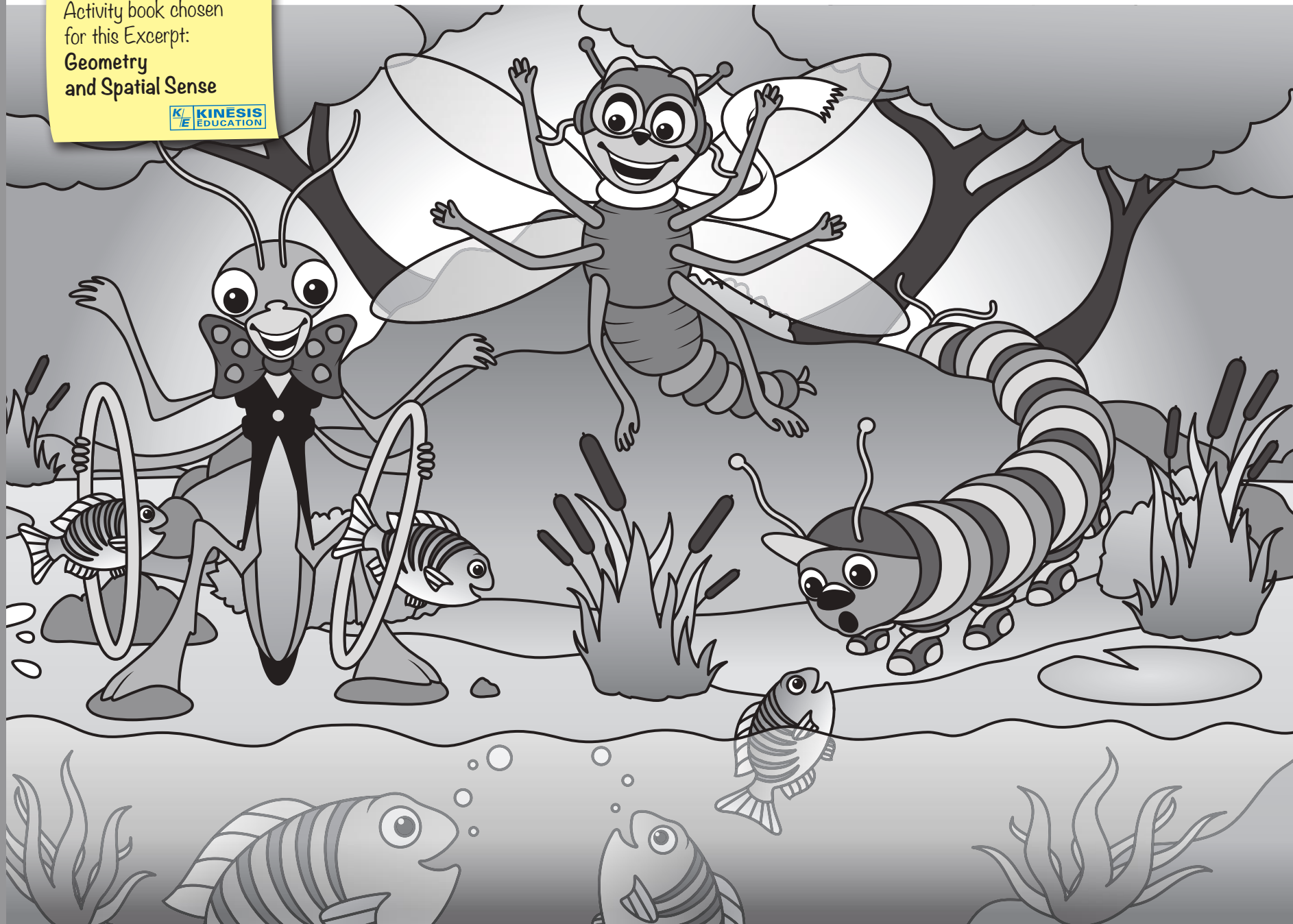
DIAGNOSTIC ASSESSMENT

GEOMETRY AND SPATIAL SENSE

QUICKCHECK™ MATH

Activity book chosen for this Excerpt:
Geometry and Spatial Sense

KINESIS EDUCATION



7 Connect each shape to its differently-oriented match using colour and size as clues.

This **number** and **heading** relate to the same number in the Student Resource.

KINESIS EDUCATION

Check Point #1

The **Check Point assessment activities** in this book have been designed for diagnostic assessment and are appropriate for use **prior to** a cycle of learning.

KINESIS EDUCATION

ts the opportunity to identify
l squares in different orientations.
ct that the geometric properties
nt even when that shape is
oriented differently. Students discuss the
make shapes identifiable even when orie
(e.g., geometric properties such as numb
vertices). What geometric properties do
identify and describe shapes?

Outlines the content to be assessed and often strategies to look for.

KINESIS EDUCATION

Materials Needed

Have two sizes of yellow triangle, red rectangle, and blue square attribute blocks of the same thickness available for the following assessment tasks.

Lists the manipulatives and templates needed for the particular assessment activity.

KINESIS EDUCATION

Student Resource:
A reproduction of the activity in the Student Resource needed for the assessment tasks.

KINESIS EDUCATION

Question/Task	What To Look For
ttribute blocks on the table in front of se a shape. Now, show me a shape that is Why did you choose that shape?" above task with one other shape.	■ Students may count sides or cor recognition (placing shapes on side by side for comparison), or a familiar real object to explain ■ If students choose squares as a probe further and ask for justifi out that squares are a special kind of rectangle- they have four sides that are exactly the same length.
2. Point to the large yellow triangle attribute block. Then have students look at only the bottom grid of their Student Resource. Say: "Find a shape that is the most like this one. How do you know?"	■ Are students able to use geometric properties to identify shapes, no matter their orientation? ■ Students point to either of the triangles in the bottom grid. They may use any of the following reasons for their comparisons, e.g., "This looks the same, but it is just tipped upside down on its point/corner; this one has three sides/lines/points too; they are both triangles, but one is pointing down and one is pointing up."

Question/Task:
Open questions and tasks allow for a range of appropriate student responses and help reveal student strategies and thinking.
*Choose which tasks and questions suit your purposes the best. There is no need to do them all.

KINESIS EDUCATION

What to Look For:
Defines a range of appropriate responses and strategies to help you make connections between your observations and curriculum expectations.

KINESIS EDUCATION

15 Relate each set of shapes to its corresponding traditional shape.

This **number** and **heading** relate to the same number in the Student Resource.

KINESIS EDUCATION

Check Point #2

The **Check Point assessment activities** in this book have been designed for diagnostic assessment and are appropriate for use **prior to** a cycle of learning.

KINESIS EDUCATION

ts the opportunity to compare
of the same shape. Students
are similar (e.g., geometric
r of sides and ve
strategies are students using to perform t
tasks? Do they use tactile or visual compa
count the number of straight sides and ve

Outlines the content to be assessed and often strategies to look for.

KINESIS EDUCATION

Materials Needed

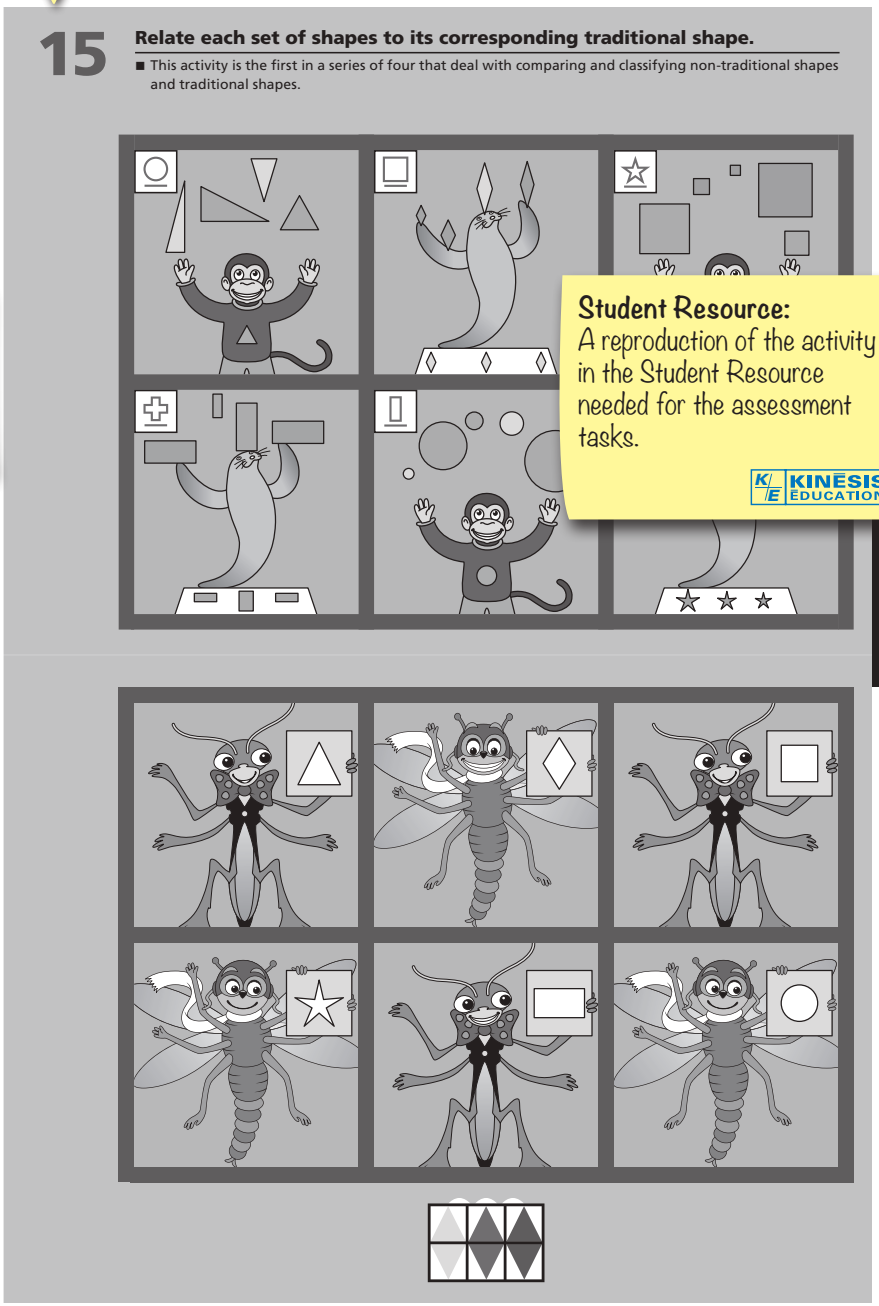
Have a rectangle and a triangle attribute block, cut-outs of different representations of these shapes from the Shape Template*, and a sorting mat available for the following assessment tasks. The reproducible* Shape Template *can be found at the end of this Geometry section on page 61.*

Lists the manipulatives and templates needed for the particular assessment activity.

KINESIS EDUCATION

* Reproducible templates can be found at the end of this section.

KINESIS EDUCATION



Student Resource: A reproduction of the activity in the Student Resource needed for the assessment tasks.

KINESIS EDUCATION

Question/Task	What To Look For
nts only look at the top grid of their Student lace the triangle and rectangle attribute ont of students as well. Point to the seal ctangles that are not squares. shape is the seal juggling? Show me/tell me. u know?"	■ Students may select the rectang they may say "door shapes," or "rectangle." ■ Students reason in one of the f — They relate the rectangles to "They all look like doors. Some are tipped over but they are all still door-shaped." — They describe the rectangles by their geometric properties, e.g., "I know because I counted and they all have four lines/four sides/four corners."
2. Cut out the shapes from the *Shape Template* and place them and a sorting mat in front of students. Put a rectangle attribute block on one side of the sorting mat and a triangle attribute block on the other side of the sorting mat. Say: "Sort the shapes. Find all the triangles and put them here. Find all the rectangles and put them here. How do you know you are right?"	■ Do students sort all the shapes? If so, students may sort the shapes according to the following criteria. — They count the number of sides and vertices. E.g.: "These all have three lines/sides/corners and these have four." — They relate the groups of shapes to familiar objects.

Question/Task:
Open questions and tasks allow for a range of appropriate student responses and help reveal student strategies and thinking.
*Choose which tasks and questions suit your purposes the best. There is no need to do them all.

KINESIS EDUCATION

What to Look For:
Defines a range of appropriate responses and strategies to help you make connections between your observations and curriculum expectations.

KINESIS EDUCATION

DIAGNOSTIC

STUDENT OBSERVATION SHEETS

GEOMETRY AND SPATIAL SENSE

GRADE 1

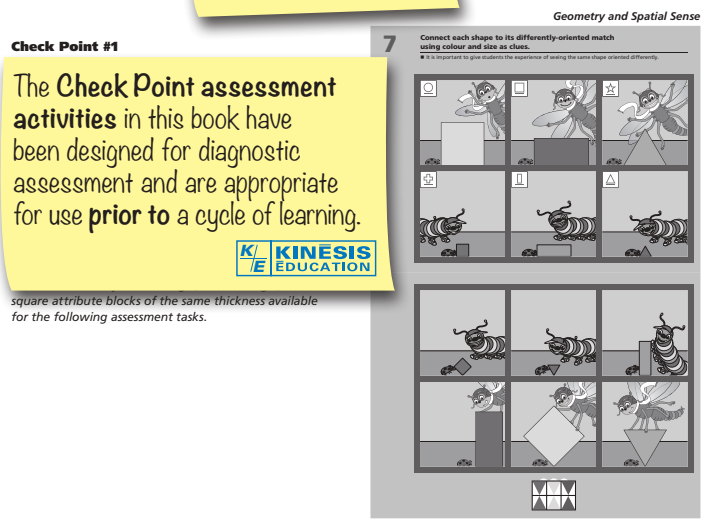
DIAGNOSTIC STUDENT OBSERVATION SHEET
GEOMETRY AND SPATIAL SENSE

QUICKCHECK MATH

Name: Date:

Assessment Activity Correlation

KINESIS EDUCATION


7 Connect each shape to it olour and size as clues.

Geometry and Spatial Sense

Check Point #1

square attribute blocks of the same thickness available for the following assessment tasks.

7 Connect each shape to its differently-oriented match using colour and size as clues.

The **Check Point assessment activities** in this book have been designed for diagnostic assessment and are appropriate for use **prior to** a cycle of learning.

KINESIS EDUCATION

Student Knows

- ☐
- ☐
- ☐

Prior to the assessment list the appropriate knowledge, skills and strategies to look for during the assessment.
For guidance with identifying these, use the **Assessment Focus** and **What to Look For** sections from the specific assessment activity you choose. Your curriculum documents are excellent sources as well.

Check the appropriate boxes as you observe and listen to student responses during the assessment.

KINESIS EDUCATION

Next Steps for Learning

- ☐
- ☐
- ☐

Prior to the assessment list the same knowledge, skills and strategies here as you listed in the Student Knows column. Check the appropriate boxes as you observe and listen to student responses during the assessment.

KINESIS EDUCATION

Other Questions I Have About the Student's Learning

Here are some examples of questions you can ask students to probe for their mathematical thinking and understanding:

"How do you know _____? Show me/tell me."

"What is the same and what is different about _____ and _____?"

"Do you think that...?"

"What if...?"

Your assessment observations may bring up further questions about your student's learning. If so, record them here. You may find some of the open questions provided here helpful as you probe further for mathematical thinking and understanding.

KINESIS EDUCATION

GRADE 1

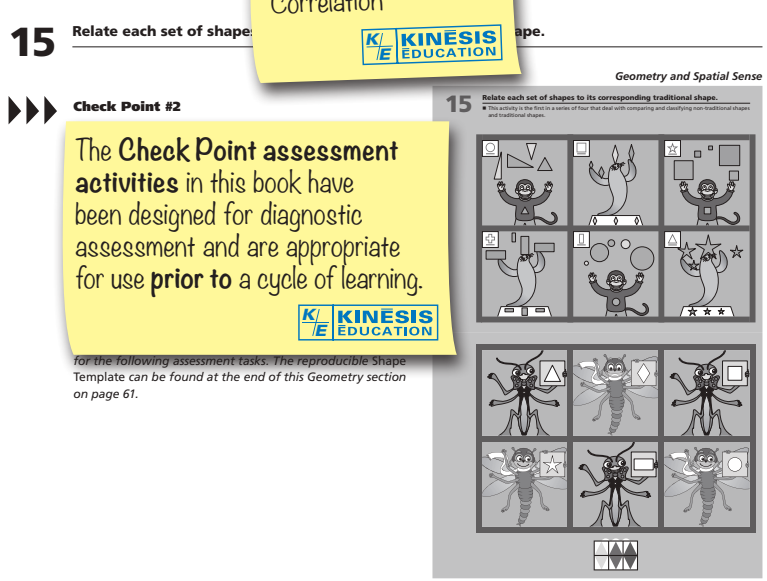
DIAGNOSTIC STUDENT OBSERVATION SHEET
GEOMETRY AND SPATIAL SENSE

QUICKCHECK MATH

Name: Date:

Assessment Activity Correlation

KINESIS EDUCATION


15 Relate each set of shape

Geometry and Spatial Sense

Check Point #2

15 Relate each set of shapes to its corresponding traditional shape.

This activity is the first in a series of four that deal with comparing and classifying non traditional shapes and traditional shapes.

for the following assessment tasks. The reproducible Shape Template can be found at the end of this Geometry section on page 61.

The **Check Point assessment activities** in this book have been designed for diagnostic assessment and are appropriate for use **prior to** a cycle of learning.

KINESIS EDUCATION

Student Knows

☐

☐

☐

Prior to the assessment list the appropriate knowledge, skills and strategies to look for during the assessment.
For guidance with identifying these, use the **Assessment Focus** and **What to Look For** sections from the specific assessment activity you choose. Your curriculum documents are excellent sources as well.

Check the appropriate boxes as you observe and listen to student responses during the assessment.

KINESIS EDUCATION

Next Steps for Learning

☐

☐

☐

Prior to the assessment list the same knowledge, skills and strategies here as you listed in the Student Knows column. Check the appropriate boxes as you observe and listen to student responses during the assessment.

KINESIS EDUCATION

Other Questions I Have About the Student's Learning

Here are some examples of questions you can ask students to probe for their mathematical thinking and understanding:

"How do you know _____? Show me/tell me."

"What is the same and what is different about _____ and _____?"

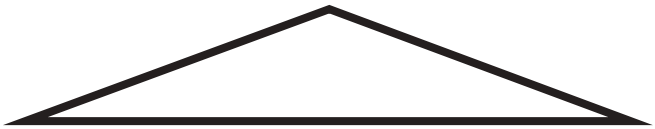
"Do you think that...?"

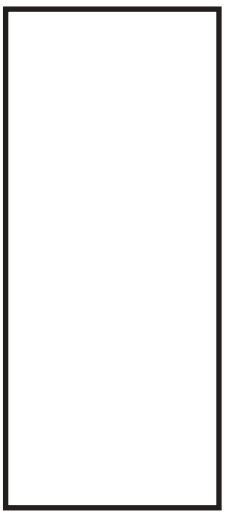
"What if...?"

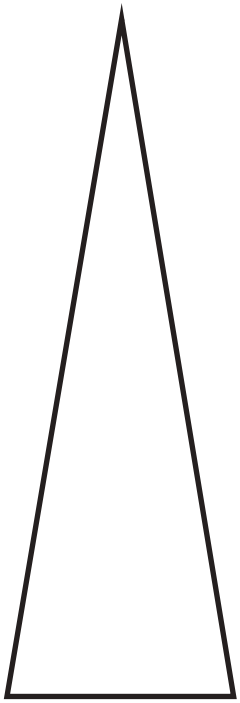
Your assessment observations may bring up further questions about your student's learning. If so, record them here. You may find some of the open questions provided here helpful as you probe further for mathematical thinking and understanding.

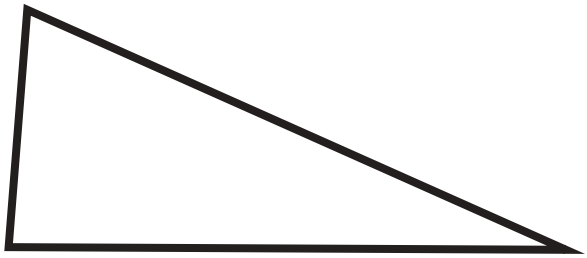
KINESIS EDUCATION

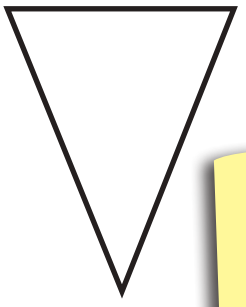
SHAPE TEMPLATE











Reproducible templates provided

KINESIS EDUCATION

TEACHER NOTES

Additional page
to enter your notes

KINESIS EDUCATION

GLOSSARY

attribute blocks. Tools that help students learn. A set of attribute blocks usually includes five shapes (rectangle, square, circle, triangle, hexagon); each shape comes in three colours, two sizes, and two thicknesses.

capacity. The maximum quantity a container can hold.

cardinality. The last number counted in a set of objects, denoting the total number of objects in the set.

conservation. The property of number or shape by which its basic nature remains the same regardless of a change in physical position, orientation, or attributes (e.g., colour, size). E.g.: A group of four counters is four whether the four counters are arranged close together or farther apart.

connecting cubes. Small plastic manipulative blocks that can attach to each other.

counting on. An addition/counting strategy where students start with a known number and th a certain quantity more from that number.

Glossary of all words found in italics in this Diagnostic Assessment Teacher Resource

KINESIS EDUCATION

five frame. A 1 x 5 array. Students place counters, stickers, or dots to show quantities to five.

geoboard. A square board with a grid of pegs (often a 10 x 10 or 11 x 11 grid). Students use elastics to connect the pegs and make shapes.

graph. A drawing that shows data.

- **bar graph.** A graph that uses bars, either horizontal or vertical, to represent the frequency of an event or occurrence.
- **pictograph.** A graph that uses pictures and symbols to represent each item in a data set.

hundreds chart. A 10 x 10 chart. Each square in the chart contains a whole number in order from 1 to 100.

mass. A physical attribute of objects that can be measured in grams or kilograms. The amount of matter of an object or body.

non-standard units. Objects used as measurement units. Some examples are paper clips, cubes, straws, yogurt containers.

number composition. The joining of two numbers to make a third greater number. E.g.: Ten can be composed of a group of four and a group of six or a group of nine and a group of one.

number cube. A small plastic or wooden cube. Typically, each cube face shows a different numeral or number of dots from one to six.

GLOSSARY

number decomposition. The separation of a number into smaller parts. E.g.: Ten can be decomposed into a group of four and a group of six or a group of nine and a group of one.

number line. A line that represents a set of numbers.

order irrelevance. The fact that objects in a set can be counted by starting with any object in the set and the total number will be the same.

one-to-one correspondence. The association of one object to only one number, symbol, or picture.

pattern blocks. Plastic or wooden manipulative sets that include the following: green equilateral triangles; orange squares, tan rhombuses and larger blue rhombuses, red trapezoids, and yellow hexagons.

polygon. A closed shape of three or more straight sides.

properties. Qualities of objects that can be determined by the five senses: touch, taste, seeing, hearing, and smelling.

rectangle. A closed shape with four right-angle vertices and four straight sides. Opposite sides are equal.

subitizing. The ability to visually recognize a number of objects without counting.

square. A rectangle with four equal sides and four right angles.

ten frame. A 2 x 5 array. Students place counters, stickers, or dots to show quantities to ten.

triangle. A closed shape with three straight sides and three vertices.

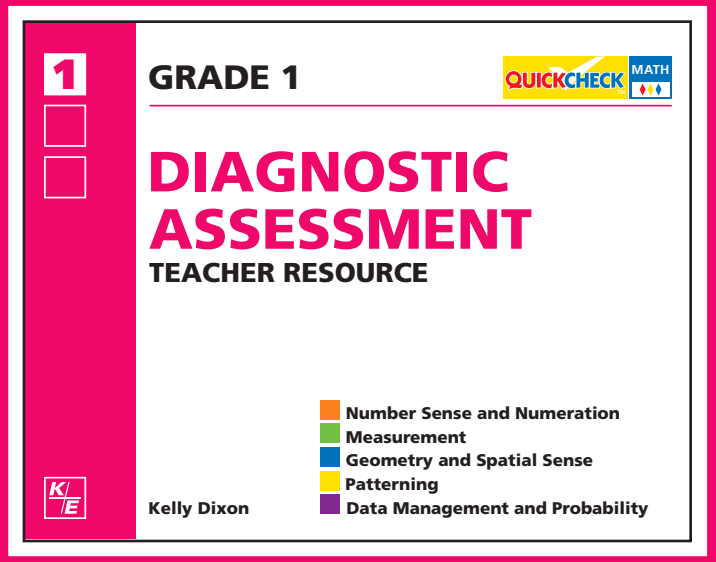
vertex. The corner or endpoint where two lines meet.

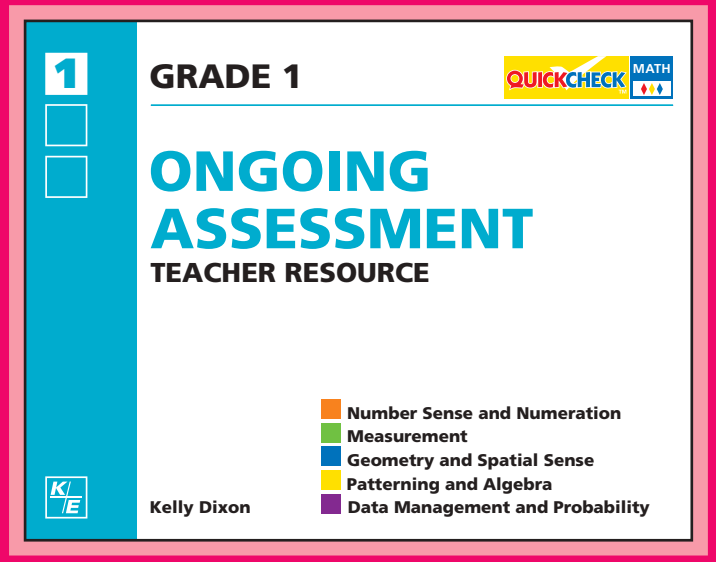
Printed in 2021

KINESIS EDUCATION
www.ebbp.ca

THREE EASY WAYS TO ORDER!
Tel.: 1 888 532-9466 Email: editions@ebbp.ca Fax: 1 866 988-5929

QUICKCHECK™ MATH





GRADE 1 ASSESSMENT RESOURCE PACKAGE
ISBN: 978-2-7615-0442-3
Product No. 404 0762

GRADE 1 ASSESSMENT RESOURCE ADD-ON PACKAGE
ISBN: 978-2-7615-0441-6
Product No. 404 0721

ISBN 978-2-7615-0444-7
9 782761 504447

K/E KINESIS EDUCATION
www.ebbp.ca

404 0705
Printed in Canada