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TEKS Grade K Module 2 Fluencies

**Lesson 1**

**Fluency Practice (17 minutes)**

⬛ Making 5 with 5-Group Mats **K.2I** (6 minutes)

⬛ Draw More to Make 5 **K.2I** (8 minutes)

⬛ 5-Group Hands **K.2C, K.2D** (3 minutes)

**Making 5 with 5-Group Mats (6 minutes)**

Materials: (S) 5-group mats (Fluency Template 1), 5 linking cubes

Note: While students are working with geometry, the fluency goal throughout Module 2 will be to maintain

and further develop number concepts to 10 (see Fluency Practice note in Kindergarten Module 1 Lesson 1).

T: Touch and count your cubes.

S: 1, 2, 3, 4, 5.

T: Touch and count the dots on your mat.

S: 1, 2, 3, 4, 5.

T: Our job is to make 5. Put 4 cubes on the dots of your mat. (Check to see that students place the

cubes from left to right without skipping any dots.) Raise your hand when you know how many

more cubes to make 5. (Wait until all hands are raised, and then signal.) Ready?

S: 1.

T: We can tell how to make 5 like this: 4 and 1 make 5. Echo me, please.

S: 4 and 1 make 5.

Continue working through the decompositions of 5 in a systematic way. As students begin to demonstrate

mastery, scale back the amount of guidance: “Show me *X* cubes; say the number sentence.”

**Draw More to Make 5 (8 minutes)**

Materials: (S) Draw more (Fluency Template 2)

Note: Go over the answers, and direct students to energetically shout “Yes!” for each correct answer.

After giving clear instructions and completing the first few problems together, allow students time to work

independently. Encourage them to do as many problems as they can within a given time frame.

**5-Group Hands (3 minutes)**

Materials: (T) Large 5-group cards (5–7) (Fluency Template 3)

T: (Show the 6-dot card.) Raise your hand when you know how many dots are on top. (Wait until all

hands are raised, and then signal.) Ready?

S: 5.

T: Bottom?

S: 1.

T: We can show this 5-group on our hands. Five on top, 1 on the bottom,

like this. (Demonstrate on hands, one above the other, as shown to the

right.)

S: (Show 5 and 1 on hands, one above the other.)

T: Push your hands out as you count on from 5, like this. 5 (extend the

top hand forward), 6 (extend the bottom hand forward). Try it with

me.

S: 5 (extend the top hand forward), 6 (extend the bottom hand forward).

Continue with 5, 6, and 7, steadily decreasing guidance from the teacher, until

students can show the 5-groups on their hands with ease.



**Lesson 2**

**Fluency Practice (12 minutes)**

⬛ Making 3 with Triangles **K.2I** (3 minutes)

⬛ Make a Shape **K.6F** (5 minutes)

⬛ Groups of 6 **K.2C** (4 minutes)

**Making 3 with Triangles (3 minutes)**

Materials: (S) 3 beans, 1 paper or foam triangle, personal white board

Note: This activity was chosen to set the stage for the analysis of triangles coming in today’s lesson.

T: Touch and count the corners of the shape.

S: 1, 2, 3.

T: Touch and count your beans.

S: 1, 2, 3.

T: Our job is to make 3. Put 2 beans on the corners of your shape. Keep the other bean in your hand.

How many beans are on your shape?

S: 2.

T: How many beans are in your hand?

S: 1.

T: We can tell how to make 3 like this: 2 and 1 make 3. Echo me, please.

S: 2 and 1 make 3.

T: Show me 1 bean on your shape. Keep the rest in your hand. How many beans on your shape?

S: 1.

T: How many beans in your hand?

S: 2.

T: Raise your hand when you can say the sentence, and start with 1. (Wait until all hands are raised,

and then give the signal.)

S: 1 and 2 make 3.

Guide students as they write the equations on their personal white boards. Challenge students to list and

verify that they have found all possible combinations.

**Make a Shape (5 minutes)**

Materials: (S) Craft sticks or straws of two different lengths, foam or construction paper work mat

Note: Refrain from naming the shapes at this point. Ask students, if they know them, to keep the names of

the shapes secret for now. If students name the shapes, have them explain their thinking by describing the

shape’s attributes using informal language: “I knew I made a triangle because it has three corners.”

T: Let’s play Make a Shape. Put three craft sticks this size (hold up the longer of the two lengths) on

your mat.

T: Move the sticks so they make a shape with three points.

S: (Move the sticks to form a triangle shape.)

T: Touch and count the points.

S: 1, 2, 3.

T: Touch and count the sides.

S: 1, 2, 3.

T: Are there any curved sides?

S: No.

T: Trade in your three long sticks for three short ones, like this (show students an example of the

shorter length), and put them on your mat.

T: Move the sticks so they make a new shape with three points.

S: (Move the sticks to form a different triangle shape.)

T: Does your shape still have three points? Three sides? No curved sides? (Pause after each question

to allow students time to verify.)

S: (Respond to questions.)

T: Now, put one of your sticks back. Get a stick this size (hold up the longer of the two lengths), and

put it on your mat.

S: (Place the longer stick on the mat so there are now two short and one long.)

T: Move the sticks so they make a new shape with three points.

S: (Move the sticks to form a different triangle shape.)

Have students count the points and sides again and verify that there are no curved sides so that they realize

that the attributes of the shape are the same, even as the shape takes on a different appearance. Have them

carefully rotate their work mats to view the shape from different angles.

Here is a suggested sequence with names of shapes listed for the teacher’s reference:

1. A triangle composed of two long sticks and one short

2. A square composed of four long sticks

3. A smaller square composed of four short sticks

4. A rectangle composed of two short sticks and two long sticks

**Groups of 6 (4 minutes)**

Note: This maintenance fluency activity helps students gain efficiency in counting objects in varied

configurations.

T: When the music starts, calmly walk around the room, visiting corners of the room until you and your

classmates can make a group of 6. Don’t forget to count yourself! How many can be in a group?

S: 6.

T: So, if you go to a corner that already has 5 people there, can you stay?

S: Yes!

T: What if there are already 6?

S: No.

T: Remember to check all the corners of the room. See if we can all get into groups of 6 before the

music stops!

If there are not enough students to make equal groups of the designated number, supplement with puppets

or stuffed animals. Allow students to share strategies for making groups quickly.

**Lesson 3**

**Fluency Practice (13 minutes)**

⬛ 5-Group Hands **K.2C, K.2D** (5 minutes)

⬛ Making 4 with Squares and Beans **K.2A** (4 minutes)

⬛ Triangle or Not **K.6A** (4 minutes)

**5-Group Hands (5 minutes)**

Materials: (T) Large 5-group cards (Lesson 1 Fluency Template 3)

Note: We repeat work with the hands often because students need frequent practice to achieve fluency. The

same exercises must be repeated again and again. As they gain depth of understanding, they visualize. As

they visualize, they no longer need their fingers.

Conduct the activity as outlined in Lesson 1, but now continue to 10.

**Making 4 with Squares and Beans (4 minutes)**

Materials: (S) 4 beans, paper or foam squares, personal white board

Note: Students work early in the year toward fluency with sums and differences within 5. This takes time and

a great deal of practice.

T: Touch and count the corners of the square.

S: 1, 2, 3, 4.

T: Touch and count your beans.

S: 1, 2, 3, 4.

T: Our job is to make 4. Put 3 beans on the corners of your square. Keep the other bean in your hand.

How many beans on your square?

S: 3.

T: How many beans in your hand?

S: 1.

T: We can tell how to make 4 like this: 3 and 1 make 4. Echo me, please.

S: 3 and 1 make 4.

T: Show me 2 beans on your square. Keep the rest in your hand. How many beans on your square?

S: 2.

T: How many beans in your hand?

S: 2.

T: Raise your hand when you can say the sentence. (Wait until all hands are raised, and then give the

signal.)

S: 2 and 2 make 4.

Continue with placing 1 bean on the square, then 4, and finally 0 to work through all of the number

combinations. Have students write the equations on their personal white boards. Challenge students to list

and verify that they have found all possible combinations.

**Triangle or Not (4 minutes)**

Materials: (T) Paper shapes of the same color in varying sizes, a wide range of exemplars, non-examples, and

variants (Fluency Template), teacher created two-column grid, labeled *Triangle* and *Not Triangle*

with cells large enough to accommodate shapes.

Note: This is a preparatory fluency activity intended to review the previous lesson’s work with triangles and

prepare students to name and identify rectangles in a similar manner.

T: I’ll show you a shape. We’ll try to decide if it’s a triangle or not. If you think it’s a triangle, give me a

thumbs-up. If it’s not a triangle, thumbs-down. Either way, be ready to explain your choice! Once we

agree, we will place it on the grid in the correct column. Here we go. (Show an exemplar triangle.)

S: (Show thumbs up sign.)

T: You’re right! It is a triangle. Who can tell us why? (Place triangle in correct column.)

S: (Give varied responses. Justify with informal language and attributes of the shape.)

Continue identifying shapes as triangles or not triangles. Proceed from simple to complex by starting with the

exemplar of each shape, then the non-examples, and then the variants. Finish the activity by asking students

to discuss which column has more and explain their thinking.

**Lesson 4**

**Fluency Practice (13 minutes)**

⬛ Rectangle or Not **K.6A** (4 minutes)

⬛ Make a Shape **K.6F** (4 minutes)

⬛ Groups of 7 **K.2C** (5 minutes)

**Rectangle or Not (4 minutes)**

Materials: (T) Paper shapes of the same color in varying sizes, a wide range of exemplars, non-examples,

and variants (Fluency Template), teacher created two-column grid, labeled *Rectangle* and *Not*

*Rectangle* with cells large enough to accommodate shapes.

Note: This is a preparatory fluency activity intended to review the previous lesson’s work with rectangles and

prepare students to name and identify hexagons and circles in a similar manner.

This is similar to Lesson 3, but with rectangles.

Identify shapes as rectangles or not rectangles, from simple to complex, by starting with the exemplar of each

shape, then the non-examples, and then the variants. Finish the activity by asking students to discuss which

column has more and explain their thinking.

**Make a Shape (4 minutes)**

Note: This activity is repeated with a new shape, allowing students to focus on the new component, the

hexagon, rather than the logistics of the activity itself.

Conduct the activity as outlined in Lesson 2, but this time include hexagons without naming them.

**Groups of 7 (5 minutes)**

Note: This maintenance activity supports efficiency in counting objects in varied configurations.

Conduct the activity as outlined in Lesson 2, but with 7. Allow students to share their strategies for making

groups quickly.

**Lesson 5**

**Fluency Practice (12 minutes)**

⬛ Groups of Shapes **K.6A** (5 minutes)

⬛ Peek-a-Boo Shapes **K.6A** (3 minutes)

⬛ Graph Your Favorite **K.8A, K.8B, K.8C** (4 minutes)

**Groups of Shapes (5 minutes)**

Materials: (T) Signs with pictures of shapes to indicate where to form each group (Fluency Template 1)

(S) Paper cutouts of triangles, rectangles, squares, hexagons, and circles (variety of sizes, include

exemplars, non-examples, and variants) (Fluency Template 2)

Note: In this fluency activity, students bring together their insights from Lessons 1–4 to form groups, each

defined by a shape. This allows teachers to also use shapes as part of their classroom management

techniques, which will further embed geometry into the classroom culture.

T: Choose a shape, and then meet me at the rug.

T: Look at your shape. Raise your hand if you know the name of your shape. When I give the signal,

whisper the name of your shape to yourself. Ready?

T: Look around the room. Do you see signs with pictures of shapes?

S: Yes.

T: Do you see your shape?

S: Yes.

T: When I start the music, I want you to calmly walk to the sign that has the same shape as yours.

T: When I point to your group, say the name of your shape. (Point to the group of triangles.)

S: Triangles.

Continue identifying the remaining groups, and then call students back to the rug to trade for a new shape.

Circulate to see which students struggle with this task. Support them by having them identify the attributes of

their shape and compare it to the shapes pictured on the signs.

**Peek-a-Boo Shapes (3 minutes)**

Materials: (T) Paper cutouts of triangles, rectangles, squares, hexagons, and circles (variety of sizes, include

exemplars, non-examples, and variants), pictures of real-world objects that are flat shapes

(Fluency Template 3)

Note: With the teacher hiding the shapes, students get accustomed to visualizing, a skill they will be applying

to numbers, for example, with dot cards. This is an imperative step in developing number sense. It is a

significant moment when students realize they can make a mental picture of something.

One shape at a time, show students each shape briefly. Then, take the shape out of view. Remind students

beforehand that they are to use the *listen, think, raise your hand, wait for the snap* procedure to name the

shape in choral response. Start with easy shapes to build confidence, and then steadily increase the level of

difficulty.

**Graph Your Favorite (4 minutes)**

Materials: (T) 2-column grid on board or chart (S) 1 sticky note

Note: This fluency activity maintains students’ understanding of representing and interpreting data in object

picture graphs.

T: (Display a two-column grid labeled “Swinging” and “Running” with cells large enough to

accommodate sticky notes.) Which activity do you prefer? Place your sticky note in the column to

show your choice.

S: (Place sticky notes.)

T: Which activity do most of us prefer? How can you tell?

**Lesson 6**

**Fluency Practice (12 minutes)**

⬛ Beep Number **K.2A** (4 minutes)

⬛ Hide and See 5 **K.2I** (4 minutes)

⬛ Take Apart Groups of Circles **K.2I** (4 minutes)

**Beep Number (4 minutes)**

Note: This fluency activity ensures that students gain flexibility with number order in both directions on the

number line.

Materials: (T) Personal white board (optional) (S) Number path (Fluency Template) (optional)

T: Let’s play Beep Number! Listen carefully while I count. Instead of saying a number, I’ll say *beep* .

You can touch each number on your number path as I say it. When you know what the beep number

is, raise your hand. 5, beep, 7. (Wait until all hands are raised, and then give the signal.)

S: 6.

T: (Turn over the personal board to reveal the number 6 so that students can verify that their answer

was correct.)

T: 7, beep, 5. (Wait until all hands are raised, and then give the signal.)

S: 6.

T: (Turn over the personal board to reveal the number 6.)

Continue in a thoughtful sequence, intermingling counting up and counting down. Return to a simpler

sequence if students have difficulty.

The teacher’s use of the personal white board is optional, but it can increase engagement as students perceive

the number as secret. Initially, students may rely heavily on the number path in order to determine the

missing number. Challenge students to solve mentally when they are ready.

**Hide and See 5 (4 minutes)**

Materials: (S) 5 linking cubes, personal white board

Note: In this activity, students’ understanding of the conservation of a number develops into part to whole

thinking at the concrete level, anticipating the work of Module 4 (number bonds, addition, and subtraction).

T: Touch and count your cubes.

S: 1, 2, 3, 4, 5.

T: Hide 2 behind your back. How many can you see?

S: 3.

T: Put them back together. How many cubes do you have?

S: 5.

T: Hide 1 behind your back. How many can you see?

S: 4.

T: Put them back together. How many cubes do you have?

S: 5.

Variation: As students put the cubes together, they can write the expressions on their personal white boards.

Challenge students to list all possible combinations.

**Take Apart Groups of Circles (4 minutes)**

Materials: (S) Personal white board

Note: This fluency supports adding and subtracting within 5.

T: Draw three circles on your board. (Wait for students to do this.) Put an X on two of them. How many

circles have an X?

S: 2.

T: How many circles do not have an X?

S: 1.

T: How many circles are on your board?

S: 3.

T: Raise your hand when you can say the number sentence starting with 2. (Wait for all students to

raise their hands, and then signal.) Ready?

S: 2 and 1 make 3.

T: Very good. Let’s go a little faster now. Erase. Draw four circles on your board. (Wait for students to

do this.) Put an X on three of them. (Wait.) How many do not have an X?

S: 1.

T: Raise your hand when you can say the number sentence starting with 3. (Wait for all students to

raise their hands, and then signal.) Ready?

S: 3 and 1 make 4.

Continue working through problems within 5. Alternatively, students can write the equation when 3 is the

total and the expressions when 4 or 5 is the total.

**Lesson 7**

**Fluency Practice (12 minutes)**

⬛ Show Me Shapes **K.6B** (4 minutes)

⬛ Making 5 with 5-Group Mats **K.2I** (5 minutes)

⬛ 5-Group Hands **K.2C, K.2D** (3 minutes)

**Show Me Shapes (4 minutes)**

Materials: (S) Assortment of solid shapes, possibly a mixture of everyday objects and wooden or plastic solid

shapes

Note: In this activity, students continue to analyze solid shapes to gain fluency with recognizing attributes

and using geometric vocabulary.

Scatter the solid shapes and objects onto the students’ tables or in the center of the rug.

T: Look at the shapes that are on the rug. I will ask you to find a certain kind of shape. When you find

it, hold it up. Ready? Show me shapes that have points.

S: (Hold up cubes and cones.)

T: Yes. Put them back on the rug, and listen to what I want you to find next. Show me shapes that

have no points.

S: (Hold up spheres.)

T: Yes. Now, show me shapes that have a curve.

S: (Hold up spheres, cones, and cylinders.)

Continue having students test each other so they practice the vocabulary.

**Making 5 with 5-Group Mats (5 minutes)**

Materials: (S) 5-group mats (Lesson 1 Fluency Template 1), 5 linking cubes

Note: In this activity, students work toward fluency with numbers within 5.

Conduct the activity as outlined in Lesson 1, but now have students rotate their mats so that they work with

5-groups in the vertical orientation.

**5-Group Hands (3 minutes)**

Materials: (T) Large 5-group cards (Lesson 1 Fluency Template 3)

Note: Students’ facility with their hands lays the foundation for the use of the number line.

Conduct the activity as outlined in Lesson 1, but now continue to 10. Consider showing the cards in the

vertical orientation so that students can gain flexibility in locating the 5-group.

**Lesson 8**

**Fluency Practice (12 minutes)**

⬛ Position Words Game **K.6A** (4 minutes)

⬛ Show Me Shapes **K.6B** (4 minutes)

⬛ Rekenrek Roller Coaster **K.2A** (4 minutes)

**Position Words Game (4 minutes)**

Note: As students work with position words, they are analyzing their world and their relationship to that

world in space. This leads to insights about measurement and distance.

Call students to the rug with their partners. Use position words such as *above, below, beside, in front of, next*

*to* , and *behind* to give directions for activities to do with a partner. For example, “Partner A, put your hand

above Partner B’s head. Stand beside your partner. Partner B, stand in front of Partner A.”

The benefit of partner work is that they check and correct each other and, in the process, explain their

thinking.

**Show Me Shapes (4 minutes)**

Note: Now that students have had the chance to really study the attributes of shapes, they should visualize

each shape as they say the name of it.

Conduct the activity as outlined in Lesson 7, but now use the names of solid shapes.

**Rekenrek Roller Coaster (4 minutes)**

Materials: (T) 20 Rekenrek

Note: As students gain deeper understanding of the numbers in relationship to 5, the Rekenrek allows them

to start building a relationship to 10 ones, as outlined in Kindergarten Module 1 Lesson 23.

T: Let’s practice counting with the Rekenrek. (Show students the 20 Rekenrek with the side panel

attached.) Say how many you see. (Slide the balls you want the students to count completely to one

side.)

Direct the students to gradually raise their hands as the numbers increase and to lower their hands as the

numbers decrease, mimicking the motion of a roller coaster. A suggested sequence is counting up, counting

down, and then in short sequences, 1, 2, 3, 2, 3, 4, 3, 4, 5, 4, 3, etc. Gradually build up to 10.

Be careful not to mouth the number words or count along with the students. Listen carefully for hesitations

or errors, and return to a simpler sequence if necessary. If students demonstrate mastery, consider

introducing the 5-group orientation (e.g., 6 as 5 red beads on top and 1 red bead on the bottom).

**Lesson 9**

**Fluency Practice (10 minutes)**

⬛ Groups of Shapes (Solid Shapes) **K.6B** (3 minutes)

⬛ Groups of 9 **K.2C** (3 minutes)

⬛ Hide and See 5 **K.2I** (4 minutes)

**Groups of Shapes (Solid Shapes) (3 minutes)**

Note: Kinesthetic learners benefit greatly from getting up and

moving in this fluency activity. As they move, they are analyzing

and are encouraged to talk about how they know where to go.

Materials: (T) Signs with pictures of shapes to indicate where

to form each group (S) Assortment of real-world

objects and wooden or plastic solid shapes

Conduct the activity as described in Lesson 5, but with solid

shapes.

**Groups of 9 (3 minutes)**

Note: This fluency activity helps students gain efficiency in counting objects in varied configurations.

Conduct the activity as outlined in Lesson 2, but with 9. Allow students to share their strategies for making

groups quickly.

**Hide and See 5 (4 minutes)**

Materials: (S) 5 linking cubes, personal white board

Note: In this fluency activity, students’ understanding of the conservation of a number develops into part

to whole thinking at the concrete level, anticipating the work of Module 4 (number bonds, addition, and

subtraction).

Conduct the activity as described in Lesson 6. Challenge students to list all possible combinations.

**Lesson 10**

**Fluency Practice (5 minutes)**

⬛ Groups of Shapes **K.6B** (3 minutes)

⬛ 5-Group Hands **K.2C, K.2D** (2 minutes)

**Groups of Shapes (3 minutes)**

Note: Kinesthetic learners benefit greatly from getting up and moving in this fluency activity. As they move,

they are analyzing and are encouraged to talk about how they know where to go.

**5-Group Hands (2 minutes)**

Materials: (T) Large 5-group cards (Lesson 1 Fluency Template 3)

Conduct the activity as outlined in Lesson 1, but now have students say the number sentence (for example,

5 and 2 make 7) as they show the 5-groups on their hands.

Note: Students see themselves improve as they continue working with numbers. Invite them to notice their

improvement, and celebrate small successes and small steps toward mastery.

Note: The Fluency Practice activities have been shortened, assuming more time is needed for the culminating

task.