Overall Structure

1. **Explore, Play, and Discuss**: These activities provide opportunities for students to explore the initial ideas of the section. This section can be completed asynchronously using digital manipulatives and response tools, or using physical manipulatives and the student workbook pages with guiding questions for caregivers. If planning for a section per week, these activities would ideally be assigned earlier in the week.

2. **Deep Dive**: These activities are key learning opportunities for students around the section goals. **If there are chances for in-person or virtual synchronous time, these would be the activities to do collaboratively to share ideas and build community.** If done asynchronously, opportunities to view and respond to peer work or sample student work as well as receive feedback from teachers (and perhaps peers), is essential for these activities. Formative assessment is also a part of this section to check in on student understanding. If planning for a section per week, these activities would ideally be done mid-week.

3. **Synthesize and Apply**: These activities are ways for students to synthesize the learning of the section and for teachers to assess student understanding toward the section learning goals. These activities can be completed asynchronously, with either written, in-person, or automated feedback. If planning for a section per week, these activities would ideally be done toward the end of the section.

4. **Ongoing Practice**: These provide opportunities for students to practice unit topic ideas and build toward computational fluency. In K–5, the activities in this section are typically practice problems and center games that can be played independently, with a family member, or with classmates. In IM 6–12, each lesson includes a distributed practice set. Many existing digital platforms already have IM 6–12 practice problems loaded in so that students can complete and submit them online. Some can be autoscored.

5. **Anytime Resources:** The activities in this section have the flexibility to be used anytime during a section. In K–5, these are center activities that provide opportunities for students to build computational fluency across the year. In 6–12, these activities are modeling prompts that offer students the opportunities to engage in mathematical modeling.

Grade K, Unit 3: Flat Shapes All Around Us

Abbreviated Unit Narrative

This unit is focused exclusively on two-dimensional shapes to help students develop concepts and geometric language with more familiar shapes. Students initially understand shapes only visually—a rectangle is a rectangle because it looks like a door. Because young children are often shown only one or two examples of a shape, they may have a very limited image of shapes when they come to kindergarten even if they know the shape name.

Students need to explore many different examples of shapes to broaden their understanding and allow them to perceive shapes in their environment. Students learn that congruent shapes are still the "same" even if they are in different orientations, a crucial understanding for recognizing and describing shapes.

In this unit, students use informal language to describe, compare, and sort shapes. Students learn and use the names of a limited set of shapes (circle, triangle, rectangle, and square.) Students do not need to describe what makes a triangle a triangle until Grade 1.

Section A Goals

- Recognize and describe shapes in the environment.
- Use informal language to describe and compare shapes and their attributes.

*There are 9 lessons in this section, so it may take 1.5 – 2 weeks to complete the activities recommended in this section. However, since the standards in this unit are not major work of the grade we recommend trimming the number of activities to fit within the allotted week to leave more time for the upcoming units around the major work of the grade.

Explore, Play, and Discuss

Activity Suggestions

- Lesson 1, Activity 2: Shapes in a Picture
  - Students can describe the shapes that they see to a family member.
- Lesson 2, Activity 2: Which Shape is the Same?
  - This could be created as a matching activity.
- Lesson 4, Activity 2: Shape Sort
  - Students can explain to a family member how they sorted the shapes.
  - If time, ask students to describe (informally) the shapes they see in this digital app.
- Scavenger Hunt (optional)
  - Examples:
    - Find 2 objects that look like a circle
    - Find 3 objects that look like a square

Assessment Suggestions

- Ask students to practice counting to:
  - 10
  - 20
  - 30
- Point to objects around you that have the shape of triangles, rectangles, and circles.
  - Ask students to describe how the shapes are the same and different.

Deep Dive

Activity Suggestions

- Lesson 3, Warm-up
- Lesson 3, Activity 2: Alike and Different
- Lesson 5, Activity 1: Color Circles and Triangles
  - If this activity cannot be done by coloring, students could sort images of the shapes, put onto cards, into piles of triangles or circles.
- Lesson 6, Activity 1: Sort Rectangles
  - This could be a digital card sort that could be done with students in a whole group.
- Revisit the Math Community poster from Units 1-2.
  - What should we add?
  - What should we change?
- Invite students to share shapes they found in the Scavenger Hunt in the Explore section.

Assessment Suggestions

- Give students the shape cards.
  - Ask them to sort them into groups.
  - Ask them to describe each group.
- Point to a card with a circle and ask for the shape name.
  - Do the same for a rectangle and triangle.

Synthesize and Apply	**Activity Suggestions**
	• Lesson 8, Activity 2: Describe and Draw Shapes
	• Explore building and drawing shapes.
	  ○ Students can make shapes using straws, toothpicks, and other household objects or draw shapes. Students can also use a virtual geoboard tool to create shapes.
		Assessment Suggestions
		• Point to an image of the following shapes and ask students to name the shape:
		  ○ Circle
		  ○ Triangle
		  ○ Rectangle (that is not a square)
		  ○ Square

Ongoing Practice	• Centers:
	  ○ Picture Books, Stage 3
	  ○ Recognize Shapes, Stage 1
	  ○ Guess Who, Stage 1
	  ○ Build Shapes, Stage 1 and Stage 2

Anytime Resources	• Ceenter: Number Race Center, Stages 1 and 2 • Center: Less, Same, More and Roll and Record • IM Talking Math

Section B Goals

- Explore shapes by putting shapes together to form larger shapes

Explore, Play, and Discuss	**Activity Suggestions**
	• Lesson 11, Warm-up: How Many Do You See: 1 More and 1 Less on 5-frames
	  ○ These could be a set of cards printed out for a teacher or family member to flash the image.
	• Lesson 10, Activity 2: Pattern Block Puzzles
	  ○ If students are not able to have the blackline masters for this activity, they can build the picture using these digital pattern blocks.
	• Lesson 14, Activity 1: Find Shapes in Art
	  ○ Students can describe the shapes they see to a family member instead of participating in a gallery walk.
	• Scavenger Hunt (optional)
	  ○ Examples:
	  ■ Find a picture of something you would build with only triangles.
	  ■ Find a picture of something you would build with triangles and rectangles.
	  ■ Draw a picture of an animal using triangles, rectangles, and circles.
		Assessment Suggestions
		•

Deep Dive	**Activity Suggestions** • Lesson 12, Warm-up: Which One Doesn't Belong: Pattern Block Trapezoids • Lesson 11, Activity 1: Missing Shapes	**Assessment Suggestions** • Lesson 13, Activity 1: Where are the Pattern Blocks?

	• Lesson 12, Activity 2: Many Ways to Make a Hexagon ○ Students can build with this digital tool.	

Synthesize and Apply	**Activity Suggestions**
	• Lesson 11, Activity 2: Find the Shape
	• Lesson 14, Activity 2: Make Art with Shapes
		Assessment Suggestions
		• Point to an image of the following shapes and ask students to name the shape:
		  ○ Circle
		  ○ Triangle
		  ○ Rectangle (that is not a square)
		  ○ Square
		  ○ Hexagon

Ongoing Practice	• Centers:
	  ○ Pattern Blocks, Stage 4 and Stage 5
	  ○ Match Mine: Stage 1
	  ○ Connecting Cubes, Stages 2 and 3
	  ○ Geoblocks, Stage 2

Anytime Resources	• Ceenter: Number Race Center, Stages 1 and 2 • Center: Less, Same, More and Roll and Record • IM Talking Math