

Lesson 1: Patterns Are Everywhere!

Getting Started

? Questions to Explore

- What is a pattern?
- How do patterns help us make predictions and understand our world?



Facts and Definitions

- **Pattern:** something that happens in a regular or repeated way and allows us to make predictions about what comes next



Skills

- Identify patterns in the real world
- Distinguish between patterns and non-patterns
- Create visual patterns



Materials

- colored blocks or Legos
- colored pencils or markers
- glue or glue stick (Option 1)
- images of quilts* (Activity 3 - optional)
- Interactive Notebook
- scissors (Option 1)

Introduction

This lesson reviews non-number patterns as a foundation for working with number patterns in upcoming lessons and activities. Ask your child what a pattern is and if he can think of any examples of patterns. (If needed, explain that a **pattern** is something that happens in a regular or repeated way and allows us to make predictions about what comes next.)

Activities

Activity 1: Everyday Patterns

Ask and discuss the following questions: What are some things that we do in the fall? (watch football, see the leaves change colors, go back to school, celebrate Halloween and Thanksgiving, start wearing sweaters...) Do we do these every year and at the same time? How do we know when fall is here? What comes after fall? How do you know? What are some things we do then?

Explain that the seasons are a pattern because we know when they'll start and because we can predict what we'll do during them. Ask your child if he can identify any other patterns in our lives (for example, night and day, meals).

Watch and discuss the video at the following weblink. Narrate the video to read and explain terms to your child as needed. Ask him whether he has any new ideas about patterns in our world.



Patterns Are Everywhere

www.beyondthepage.com/link/5229/

This video shows a variety of everyday patterns through engaging and colorful images.

Provide one of the following options. Option 1 is more concrete than Option 2 because specific seasonal images are provided, while Option 2 asks your child to come up with images for each season on his own. He can also be more creative with Option 2.

Option 1

Your child will complete the pattern of the seasons using the images provided on the "Season Images" page. Cut out the images along the dotted lines and paste them into a pattern on the "Pattern of the Seasons" sheet. For Pattern 1, he should create any pattern using the images provided. For Pattern 2, he should use the images provided to create a pattern that shows the seasons in order. Advise him that he may want to wait to glue his first pattern onto the paper until he has also completed his second pattern to make sure that he has the images he needs for both.

Option 2

Illustrate the patterns of the seasons on the "Pattern of the Seasons" sheet. Make sure that your child uses different images to create two different patterns that show the seasons in order.

Activity 2: What Is a Pattern?

Make sure that your child can explain patterns in his own words, including that we are able to predict or know what comes next in a pattern. You may want to read the definition of **pattern** to him — something that happens in a regular or repeated way and allows us to make predictions about what comes next. Ask your child to work with patterns and non-patterns using shapes and colors. Be sure that he understands that non-patterns do not enable us to make predictions. For example, "red, yellow, blue" is a non-pattern because we don't know what comes next in it. It could be "red," but it could also be any other color. Provide him with blocks or Legos to create patterns and non-patterns. Remind him that we can name patterns using ABAB, AABAAB, ABCABC, etc., and ask him to practice doing so as he works on the following task.

This activity offers two options. Option 1 is the less challenging of the two because your child will work to complete given patterns. If your child is ready to create and name his own patterns, give him Option 2.

Your child will then complete the "What is a Pattern?" sheet to be stored in his Interactive Notebook. On the page, he will be asked to do the following:

1. Write the definition of pattern in his own words
2. Draw a picture of a pattern
3. Draw a picture of a non-pattern

Option 1

Provide a variety of shape and color patterns, and ask your child to complete them. Using either blocks or Legos, ask your child to identify patterns such as AAB, ABAB, and ABC. For example, red Lego, red Lego, blue Lego is an example of an AAB pattern. Red circle, yellow circle, blue circle, red circle, yellow circle, blue circle is an example of an ABC pattern. Be sure to also create and discuss some non-patterns.

Option 2

Your child will create shape and color patterns. Ask him to create a non-pattern, too.

Activity 3: Quilt Patterns (optional)

Look at a variety of quilts in your home, in books, and/or online and identify ones that have a pattern to them. Ask: "How do you know this is a pattern? If the quilt were larger, what would come next? How do you know?"

Invite your child to create his own quilt patterns using the "Quilt Coloring Page" sheets provided. Be sure that he focuses on creating a color pattern with the quilts. The first quilt pattern provides a "color by number" approach that directs your child to color the spaces given colors. The other two quilt patterns do not provide this direction, allowing your child to create his own color pattern. Your child can complete 1, 2, or all 3 sheets.

Wrapping Up

Look for and discuss patterns around the house or yard (example — flooring, bathroom tiles, fencing). Ask questions such as, "How do you know this is a pattern?" "What is repeating that makes this a pattern?"

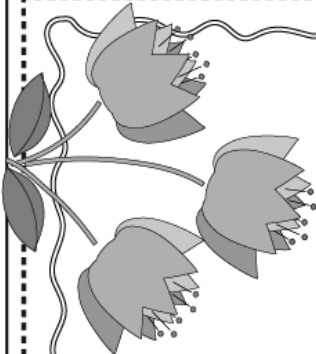
Learning Gates

Have your child take the [Learning Gates quiz](#) for this lesson.

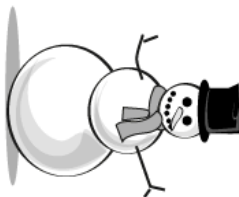
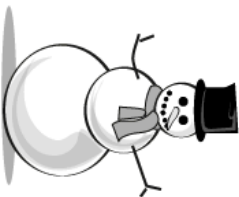
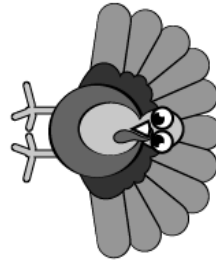
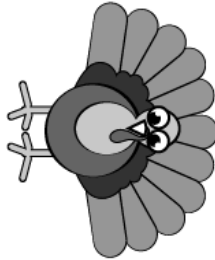
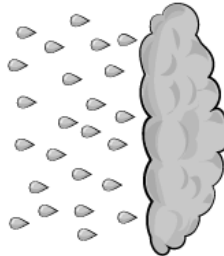
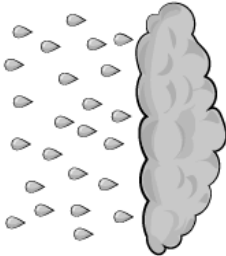
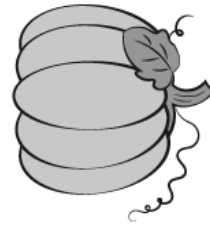
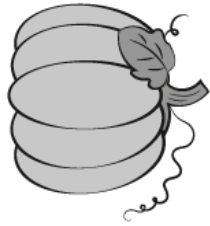
Pattern of the Seasons

Pattern 1:

Pattern 2:



Season Images



What Is a Pattern?

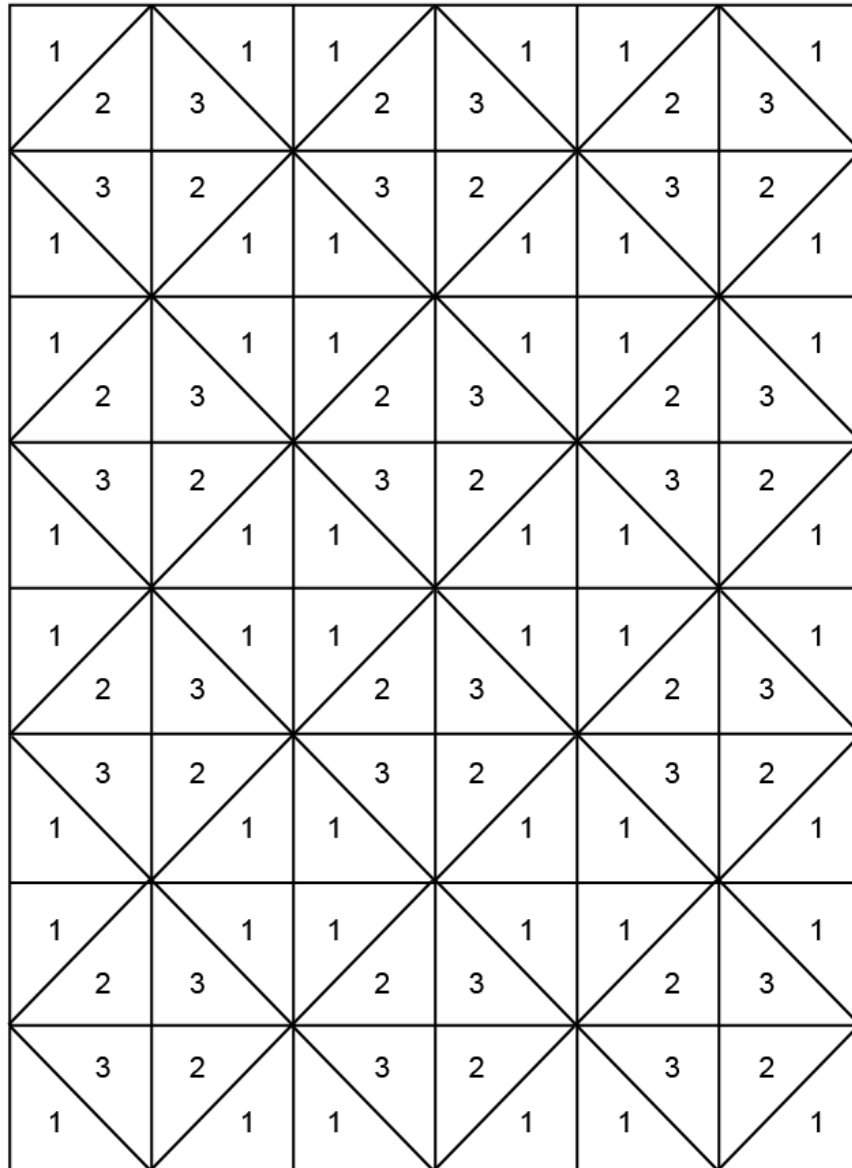
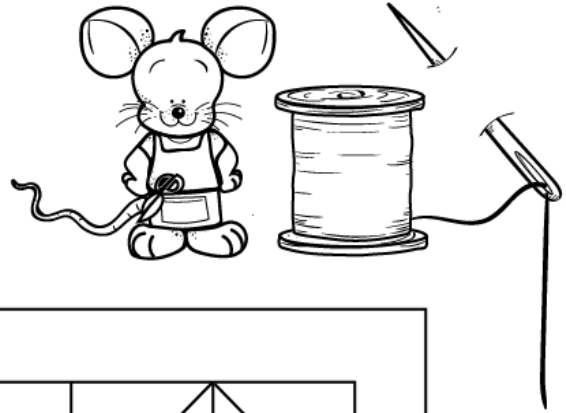
1) Write the definition of "pattern" in your own words.

2) Draw a picture of a pattern.

3) Draw a picture of a non-pattern.



Quilt Coloring Page

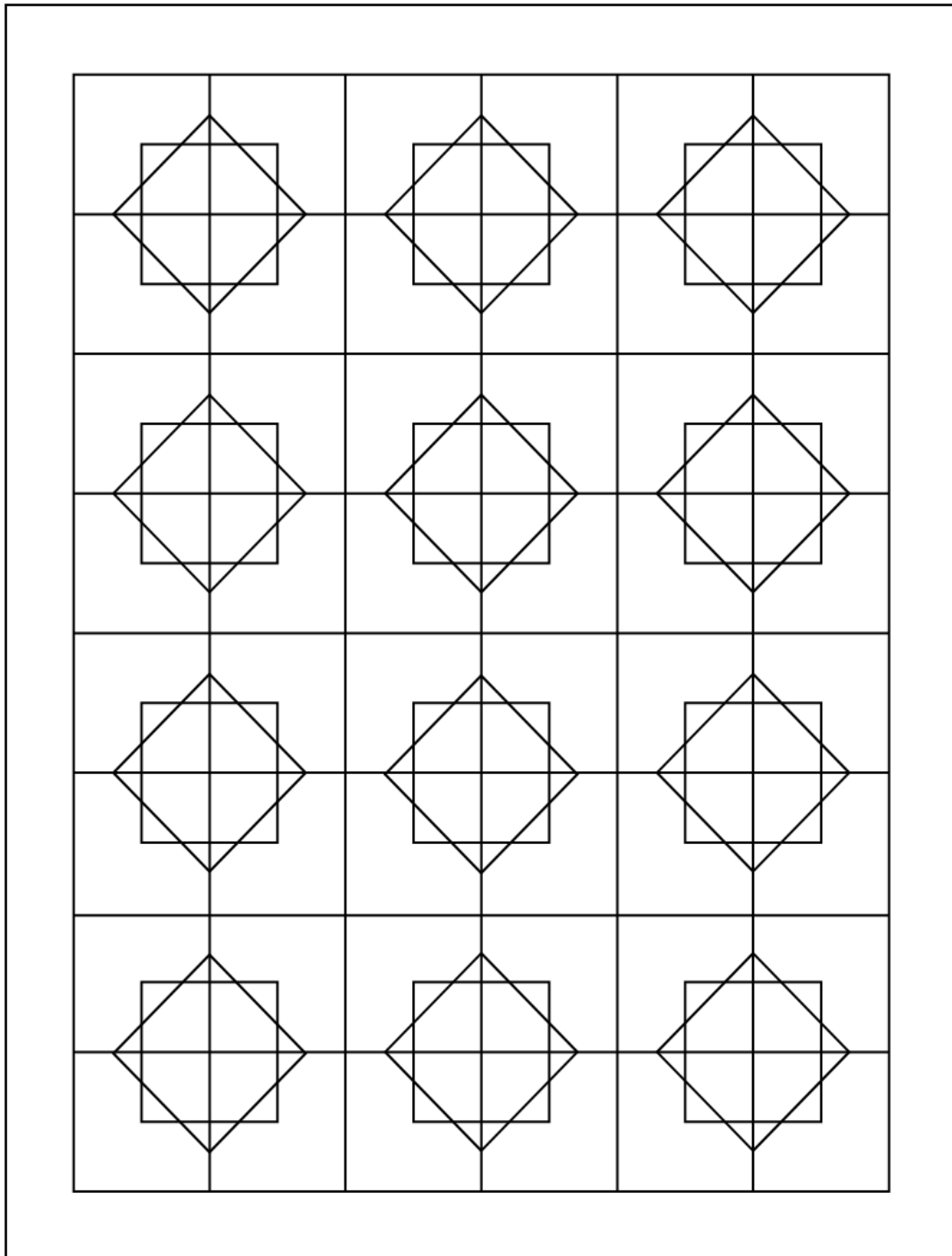
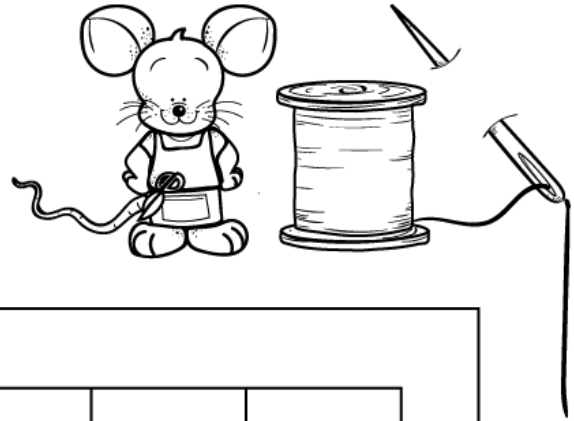


1 = Purple

2 = Blue

3 = Pink

Quilt Coloring Page



Quilt Coloring Page

