# Mathematics Alignment Lesson

Grade 1 Quarter 2 Day 80

## Common Core State Standard(s)

**1.MD.3** Tell and write time in hours and half-hours using analog and digital clocks.

**Materials Needed:**

* Large Judy Clock (from math kit)
* Small Judy Clocks for each student
* Teacher Guide- “*Hands On the*

*Hour”*

Blackline Masters- *“Time By the*

*Hour”– Journal* *Prompt*

* Cardstock- “*Times on the Hour” -*12

copies

* 12 Plastic Sandwich Bags

###### Alignment Lesson

###### Hour Hand

**Note: The teacher will need 12 copies of Cardstock, *“Times on the Hour”*. These will need to be pre-cut and placed in baggies prior to the lesson.**

1. **Activity- Hands On the Hour** **–** Refer to ***Teacher Guide*** for detailed directions.
2. **Activity- Math Expressions –** Unit 7 Lesson10 – Going Further - Activity Card – On Level. **Students will work with a partner and write hour times from 1:00-12:00 on index cards.  Next Students will mix the cards a place them face down.  They will pick a card and draw the hands on a clock (TRB M71) to show the time.  They will cut out the clock faces.  Then they will match the times on the index cards to the clock faces.**
3. **Activity Game – *Times on the Hour:*** Pair students and give each pair a small Judy Clock and a bag of times (Cardstock, “*Times on the Hour”*). Have Partners take turns pulling a time from the bag and showing that time on their small Judy Clock. When it is not their turn, they can check their partner’s work. *The teacher should circulate and check for student understanding.*

**While circulating ask each group the following questions *(use a checklist for informal data collected):***

* ***What time is on your clock?***
* ***What number is showing the hour/minute?***
* ***Show me 5:00.***
* ***Which is the hour hand (child points to the short hand or states it is the one pointing to the 5)/minute hand (the child points to the long hand or states it is the one pointing to the 12)?***
* ***It is \_\_\_\_ o’clock or thirty. I know that because the hour hand is pointing to \_\_\_\_\_.***

Assessment

* Blackline Masters- *“Time By the*

*Hour”– Journal* *Prompt*

**Homework**

MX – Homework and Remembering page 209 – Time to the Hour

# Mathematics Alignment Lesson

Grade 1 Quarter 2 Day 81

## Common Core State Standard(s)

**1.MD.3** Tell and write time in hours and half-hours using analog and digital clocks.

**Materials Needed:**

* Large Judy Clock (from math kit)
* Small Judy Clocks for each student
* Math Expressions Teacher Guide Volume 2, Student Activity Book page 267, Homework and Remembering pages 213-214
* Cardstock, *“Memory Cards”*
* Blackline Master*- “Comparing Time Journal Prompt”*

Vocabula*ry*

* Half past, hour, thirty, o’clock, time, analog, half-hour, hour hand, minute hand, clockwise, count by five

###### Alignment Lesson

###### Time to the Half Hour

**Note: In order to preserve instructional time, Cardstock, *“Memory Cards”* should be cut prior to teaching the lesson.**

**Activity 1: Time to the Half Hour on Analog Clocks**

Unit 7, lesson 12, Activity 2

1. Using a demonstration clock, review the position of both the hour hand and the minute hand when the clock is showing and exact hour of 2:00.
2. Review the term clockwise with the students by moving the minute around the clock. Ask the students to stop when the clock is showing 2:30.
3. Draw a circle on the board that has been split in half to show that the minute hand has moved half way around the clock.
4. Have students use smaller clocks to show the times that you call out to them.
5. Discuss at the half hour the hour hand has moved and now between two numbers.
6. Students complete page 267 in their Student Activity Book, numbers 4-9.

**Activity 2- Time Memory**

1. Have students review the time on each of the memory cards.
2. Then, in pairs, have students turn the cards face down, mix them up and organize their cards.
3. Students take turns turning over two cards, and telling the time that is on each card.
4. If the cards match, the students get to keep them, if not turn them back over and play continues.

Once students finish playing have them work independently to complete Blackline Master, *“Comparing Time Journal Prompt”*

**Note:** The Tell Time Lite Application on the iPad can be set to hour and half hour and used to reinforce this lesson.

Assessment

* Blackline Master- *“Comparing Time Journal Prompt”*

**Homework**

Math Expressions Homework and Remembering pages 213-214

# Mathematics Alignment Lesson

Grade 1 Quarter 2 Days 82-83

## Common Core State Standard(s)

**1.MD.3** Tell and write time in hours and half-hours using analog and digital clocks.

**Materials Needed:**

* Large Judy Clock (from math kit)
* Small Judy Clocks for each student
* Book – *The Grouchy Ladybug* by,

Eric Carle

* Blackline Master- *“I Know Time –*

*Journal* *Prompt”*

* Cardstock- “*Time on the Half-Hour”*
* Sandwich size baggies

Vocabulary

digital, analog, thirty, o’clock, hour hand, minute hand

###### Alignment Lesson

###### Time’s Up!

**Note: Prior to the start of this lesson, Cardstock- *“Time on the Half-Hour”* cards will need to be pre-cut and placed in baggies.**

**When students are justifying the position of the hands on their clocks, the following sentence stem may be used: I know \_\_\_\_\_\_ because \_\_\_\_.**

1. **Review –** Use the large Judy Clock andset the time to 4:00. Call on a student to state the time. Repeat with other times. Pass out small Judy Clocks and ask students to set their clocks to the times you state as you set the large clock. Hold up clocks – do they match? You will have some show 5:30 when you state 4:30 – again have the conversation about the hour hand needing to be in the middle of the number before it can be stated as the hour.

1. Read *The Grouchy Ladybug*, by Eric Carle. During reading, be sure to point out the clocks with times. Ask students to predict what time it will be on the next page. Discuss the concept of *one hour later* during reading. Use a large Judy clock and assign each student in the class a time from the story (analog and digital). When their time is mentioned the student stands up and models the times shown during the story.

1. Partner students. Give each pair of partners a bag with Cardstock- *“Time on the Half-Hour”*cards and small Judy clock. Partners can take turns drawing a time from the bag and showing that time on their small Judy clock. When it is not their turn, they can check their partner's work. The teacher should circulate and check for student understanding during this time. Ask groups the following questions. ***(use a checklist for informal data collected):***

* ***What time is on your clock?***
* ***What number is showing the hour/minute?***
* ***Show me 9:30.  Which is the hour hand/minute hand?***

1. Complete Blackline Master *“I Know Time Journal Prompt”* – can be an assessment piece.

**Assessment**

Observe and record if students can tell time correctly when playing *Time on the Half-Hour*

# Mathematics Alignment Lesson

Grade 1 Quarter 2 Day 84

## Common Core State Standard(s)

**1.MD.3** Tell and write time in hours and half-hours using analog and digital clocks.

**Materials Needed:**

* Large Judy Clock *(from math kit)*
* Small Judy Clocks for each student
* Blackline Masters- *“Telling Time*

*on the Hour and Half-Hour”*

* Cardstock – *“Tick Tock Clock*

*Game”, “Time Cards 1”,*

*“Time Cards 2”*

* **From Days 80 & 82-83**:

*“Time on the Hour”, “Time on*

*the Hour”*-Game Pieces

*Alignment Lesson*

###### Game Time

1. Model 3 times games/stations (Tick Tock Clock 3-in-a-Row game, Time on the Hour and Time on the Half from Alignment Lessons 76 and 79 - or you may choose to use personal time games you may have).

\*\* For an optional assessment in a center or small group, prepare a few bags with **Time** **On the Hour** and **Time** **On the Half-Hour** cards mixed together. Students can draw cards and record the digital and corresponding analog times on Blackline Master, *“Telling Time on the Hour and Half-Hour”*

1. Assign students into 4 groups for the stations. The teacher will be the 4th station – working with children based on if they need reteaching of time to the hour and to the half hour or enrichment. This will determine how you assign students into groups.

***Enrichment Ideas:*** 1. For those students who are ready, show them how to tell time at with five minute intervals (4:45, 2:15, etc.).

If step 1 above comes easy, then introduce what the blue dots between the 5 minute intervals mean and show them how to tell time (2:33, 5:16, etc.) *You may be surprised, but many students will be ready for this if they have the five minute intervals.*

You may only have time to get to one station on Day 81

after modeling the games. Allow time at the end for

questions and sharing.

**For Day 82 – quick review of station and then rotate through last 3 stations.**

**Assessment**

Observe and record the level of where each child is with telling time (hour, hour and half-hour, five minute intervals, etc.).

Day 85 Assessment Items

Day 86 Mid year summative assessment ( kind of funny to me that 1 day is allowed for this sooo realistic!!!)

# Mathematics Alignment Lesson

Grade 1 Quarter 2 Day 87

## Common Core State Standard(s)

**1.G.1** Distinguishing between defining attributes (eg., triangles are closed and three-sided) versus non-defining attributes (eg., color, orientation, overall size); build and draw shapes to possess defining attributes.

**Materials Needed:**

* Teacher Guides- *“Sorting Shapes,*

*Guess My Rule”*

* Blackline Masters- *“Thinking About-*

*Sorting Shapes”*

* Cardstock- *“ Van de Walle Shapes”*
* Chart Paper
* Baggies

Vocabulary

shapes, polygons, closed figure, two-dimensional, attributes, straight lines, curvy, vertices or corners, sides, parallel, angles, triangle, rectangle, square, trapezoid, hexagon, quadrilateral or 4 sided figure

###### Alignment Lesson

###### All Sorts of Shapes

***Prior to Lesson: The teacher will need 12 sets of Cardstock- “Van de Walle Shapes”. Copy the shapes on the 6 pages on colored construction paper or cardstock. All 6 pages should be copied on the same color construction paper, making one set of Van de Walle shapes. Each set should be a different color. These will need to be pre-cut and placed in baggies prior to the lesson.***

The following activities will allow participants to explore 2-D shapes. These activities will focus on properties (attributes) of the shapes, **not just shape identification**.

**Students should begin to understand the difference between defining and non-defining shapes. Students should understand that defining attributes are always present and are used to classify a shape or object. Non-Defining attributes may be present but do not identify what the shape is called.**

***The chart below features some defining/non-defining attributes you will discuss throughout the Geometry Unit.***

|  |  |
| --- | --- |
| **Defining Attributes** | **Non-Defining Attributes** |
| Number of sides | Orientation (right side up, upside down, any slides, flips, or turns) |
| Number of angles | color |
| Number of vertices/corners | Size (small, big, etc.) |
| Numbers of faces |  |
| Number of edges |  |
| Straight sides |  |
| Open or closed figure |  |
| Solid or plane figure (flat surface) |  |

**1. Activity- *Sorting Shapes*** **–** Refer to ***Teacher Guide*** for detailed directions.

**2. Activity- *Guess My Rule*** **–** Refer to ***Teacher Guide*** for detailed directions.

**Assessment**

See notes on Teaching Guide

# Mathematics Alignment Lesson

Grade 1 Quarter 2 Day 88

## Common Core State Standard(s)

**1.G.1** Distinguishing between defining attributes (eg., triangles are closed and three-sided) versus non-defining attributes (eg., color, orientation, overall size); build and draw shapes to possess defining attributes.

**Materials Needed:**

* Transparency – *“Name that*

*Shape!”*

* Blackline Master –“*Shape Mat”* *“Shapes”* *“The Shape I am,” “True/False,”*(one per pair of students) *“Find the Shape”*
* Chart paper
* Glue stick

Vocabulary

Rectangle- a polygon with four sides and opposite sides equal in length

Square- polygon with four sides and all sides equal in length

Trapezoid- polygon with four sides and *exactly* one set of parallel sides \*

Triangle- polygon with three sides and three angles

Attribute -characteristic of a shape, including properties, and other defining characteristics (e.g., straight sides) and non-defining characteristics (e.g., “right-side up”)

\*Further information regarding the definition of a trapezoid can be found in NCDPI unpacking

***Alignment Lesson***

***These are…these are not!***

**Activity 1: Review the Shapes**

1. Review shapes that students discussed on Day 87 (triangle, rectangle, square, trapezoid, half-circle, quarter-circle.)
2. Use Transparency, “*Name that Shape!”* or one of the books below. To activate student’s thinking about shapes.

* *Shapes, Shapes, Shapes!* By Tana Hoban
* *Color Zoo* by Lois Ehlert
* *The Shape of Things* by Dayle Ann Dodds
* *Circles and Squares Everywhere* by Max Grover

1. Teacher poses the following questions while reviewing the shapes

* *Why is this shape a \_\_\_\_\_\_\_\_?*
* *How can these both be a \_\_\_\_\_\_ when they are different sizes/colors/orientations?*
* *What attributes define this shape?*

**Activity 2: Shape Mats**

1. Distribute a Blackline Master “*Shape Mat”* and  *“Shapes”*
2. Students cut out the shapes and names of shapes.
3. When all are ready, have the students write the word “Triangle” in the blank at the top of the shape mat.
4. Students will sort the shapes into the categories (These Are… These are Not)
5. Have students glue all the triangles into the “These Are” column and five shapes that are not triangles in the “These Are Not” column; students may not all pick the same shapes for the Are Not column. That is OK.
6. Have students discuss with a partner their shapes on their individual mats. \*
7. Circulate and pose the questions below for further observation of student comprehension
   * *What changes would you have to make to the shapes in the “These are Not” box so that they could be considered a triangle?*
   * *Can you find any examples of a triangle in our classroom?*
   * *Can you draw a shape that would fit into the “These are” box on your math?*
   * *If you made one of the triangles in your “These are” box bigger or smaller, would it still be a triangle?*
8. Repeat the questions in Step 7 for shapes other than the triangle.

Sample of a Shape Mat: See CMAPP for this or our teacher manual it wouldn’t copy/paste

**Activity 3: True/False Statements**

1. Pre-cut the statements into individual strips.
2. Draw a line down the middle of a piece of chart paper.
3. Label one half “True” and the other half “False”
4. Give one strip to each pair of students.
5. Have the students decide if the statements are true or false.
6. Students explain to the class why they decided if theirs is true or false.
7. Students then glue the statement onto the appropriate side of the chart paper. See below for sample.

Assessment

* Observation of students’ conversations and work on Shape Mat
* Blackline Master, *“The Shape I Am”*

# Mathematics Alignment Lesson

Grade 1 Quarter 2 Day 89

## Common Core State Standard(s)

**1.G.1** Distinguishing between defining attributes (eg., triangles are closed and three-sided) versus non-defining attributes (eg., color, orientation, overall size); build and draw shapes to possess defining attributes.

1.G.2 Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape and compose new shapes from the composite shape.

Vocabulary

triangle, square, rhombus (see note in step #2), trapezoid, hexagon, shapes, polygons, closed figure, two-dimensional, attributes, straight lines, curvy, vertices or corners, sides, parallel, angles

**Materials Needed:**

* Teacher Guide- *“Shapes on the*

*Geoboard”*

* Blackline Masters- *“Shape*

*Creations”, “Geoboard Dot Paper”*

* Paper bags
* Books about shapes
* Pattern blocks
* Geoboards
* Rubber Bands

###### Alignment Lesson

###### Shape Designs

**Note:** Below are 3 shape activities that can be used as math stations or as whole class activities. Be sure to model *Guess My Shape* and *Build a Shape*. Students should be able to do these two independently. *Shapes on the Geoboard* should be taught by the teacher.

1. **Guess My Shape** *–* Place several pattern blocks (4-6) in a bag. (Will need several bags if students play with a partner). One student reaches in the bag and selects one shape. Do not take the shape out of the bag. Describe the shape based on how it feels. Example: My shape has 3 corners. The other student guesses the shape. If correct, students switch roles. If incorrect, continue describing the shape until it is identified.

*Variation:* One student reaches in the bag and selects one shape. He or she then uses their finger to draw the shape on their partner’s back. The partner identifies the shape and tells why he or she thinks it is that shape. Example: On my back I feel a shape with 4 straight lines. I think it is a square.

*\*\* May be a good idea to have some books about shapes in this station for students to look through.*

***As students are working, ask students to describe shapes using attribute vocabulary. You may want to have a word list or word wall to help students have productive, efficient conversations.***

1. ***Shape Creations*** – Students will use a variety of pattern blocks shapes to make a Shape Creation (vehicle, flower, monster, etc.) on Blackline Master, *“Shape Creations”*. Students will trace the design, color it, name the design, and record how many of each shape was used. ***Note: 1st grade students are not expected to use the term “rhombus”, however, they can refer to it as a 4-sided closed figure. You can introduce the term rhombus but please note that students should not be assessed on the term.***
2. ***Shapes on the Geoboard*** **–** Refer to ***Teacher Guide*** for detailed directions.

Assessment

See notes on Teaching Guide

# Mathematics Alignment Lesson

Grade 1 Quarter 3 Day 90

## Common Core State Standard(s)

**1.G.1** Distinguishing between defining attributes (eg., triangles are closed and three-sided) versus non-defining attributes (eg., color, orientation, overall size); build and draw shapes to possess defining attributes.

**Materials Needed:**

* Blackline Master- *“Comparing*

*Shapes– Journal Prompt”*

* Book, *Frog & Toad Are Friends* by

Arnold Lobel

* Pattern Blocks or Attribute Blocks
* Assortment of Buttons

Vocabulary

triangle, square, trapezoid, hexagon, shapes, polygons, closed figure, two-dimensional, attributes, straight lines, curvy, vertices or corners, sides, parallel, angles, rhombus (*Note: 1st grade students are not expected to use the term “rhombus”, however, they can refer to it as a 4-sided closed figure. You can introduce the term rhombus but please note that students should not be assessed on the term.)*

###### Alignment Lesson

###### Alike & Different

**1.** Read *“A Lost Button”* from the *Frog & Toad Are Friends* book. Ask students to discuss with a partner the attributes Toad used in describing the buttons in the story. Facilitate discussion on defining verses non-defining attributes. First Grade Students should distinguish the difference between these types of attributes.

2. Show the class a set of 10-15 buttons and make a list of attributes describing those buttons. Ask a volunteer to play the role of Toad and to choose one button to be the secret button ***(whisper and describe it to the teacher, but do not remove it from the set)***. The student playing Toad calls on other students to name a button *(ex. Someone might identify the green button)*. If incorrect, Toad must give a reason why it is incorrect *(ex. That is not my button. That button is green, but my button is yellow)*. Teacher removes the green button. Continue guessing and giving reasons as to why it is not the correct button *(and then remove that button from the collection)*. Continue until the button is chosen. Repeat several times. Again, facilitate discussion on defining verses non-defining attributes.

3. Students sit in a circle on the floor. Place a set of pattern blocks or attribute blocks in the middle of the circle. Ask each student to select one shape. It must be different from the shape of the students on his or her left and right. Students turn to the student on one side of them and compare their shapes (identifying one way the shapes are alike and one way the shapes are different). Then repeat with the student on the other side. Encourage students not to use color as an attribute. Emphasize defining attributes as students identify them.

4. Pair students and pass out Blackline Master, *“Comparing Shapes – Journal Prompt”*. Each partner selects one shape (they must be different shapes). Partners discuss the ways the shapes are alike and different. Then they record the likenesses and differences on their record sheet.

5. Have students complete Blackline Master, *“Shape Hunt-Journal Prompt”* for homework.

***The chart below features some defining/non-defining attributes you will discuss throughout the Geometry Unit.***

|  |  |
| --- | --- |
| **Defining Attributes** | **Non-Defining Attributes** |
| Number of sides | Orientation (right side up, upside down, any slides, flips, or turns) |
| Number of angles | color |
| Number of vertices/corners | Size (small, big, etc.) |
| Numbers of faces |  |
| Number of edges |  |
| Straight sides |  |
| Open or closed figure |  |
| Solid or plane figure (flat surface) |  |

**Source: Adapted from NCTM Navigating through Geometry in Prekindergarten – Grade 2**

Assessment

***Informal assessment*** – take anecdotal notes on whether students can identify both likeness and differences and if they identify only one way a shape is alike and different or state several ways

**Homework**

Blackline Master, *“Shape Hunt - Journal Prompt”*