

Math Learning Centers Overview for the Week:

Monday

	Rotation 1	Rotation 2	Rotation 3
Group 1: (Below Grade Level)	Table Time	DreamBox	Pipe Cleaner Activity
Group 2: (At Grade Level)	Pipe Cleaner Activity	Table Time	DreamBox
Group 3: (Above Grade Level)	DreamBox	Pipe Cleaner Activity	Table Time

Tuesday

	Rotation 1	Rotation 2	Rotation 3
Group 1: (Below Grade Level)	Table Time	DreamBox	Animal Sort
Group 2: (At Grade Level)	Animal Sort	Table Time	DreamBox
Group 3: (Above Grade Level)	DreamBox	Animal Sort	Table Time

Wednesday

	Rotation 1	Rotation 2	Rotation 3
Group 1: (Below Grade Level)	Table Time	DreamBox	Three Object Activity
Group 2: (At Grade Level)	Three Object Activity	Table Time	DreamBox
Group 3: (Above Grade Level)	DreamBox	Three Object Activity	Table Time

Thursday

	Rotation 1	Rotation 2	Rotation 3
Group 1: (Below Grade Level)	Table Time	DreamBox	Rocket Order Sort Activity
Group 2: (At Grade Level)	Rocket Order Sort Activity	Table Time	DreamBox
Group 3: (Above Grade Level)	DreamBox	Rocket Order Sort Activity	Table Time

Friday

	Rotation 1	Rotation 2	Rotation 3
Group 1: (Below Grade Level)	Table Time	Recording Sheet (Summative Assessment)	Ordering School Supplies as Partners
Group 2: (At Grade Level)	Ordering School Supplies as Partners	Table Time	Recording Sheet (Summative Assessment)
Group 3: (Above Grade Level)	Recording Sheet (Summative Assessment)	Ordering School Supplies as Partners	Table Time

Note on Assessment:

The assessment tools listed for each day of Table Work within each box work as formative assessments.







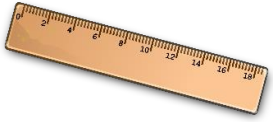


The summative assessment for this entire Standard will be the recording sheet that the students fill out on Friday. I prefer to think of them as recording sheets because they aren't using them simply for busy work or to

learn the material, but rather to record the learning that has been happening throughout the week. Some of the assessments listed throughout the table are examples of recording sheets, specifically the ones where they trace the objects that they have ordered. The recording sheet that the students will be using on Friday is shown here:

Order lengths of 3 objects

Grade 1 Measurement Worksheet

Order the three objects from the shortest to the longest. Write "1" under the shortest object and "3" under the longest object.

Note on DreamBox:

Since DreamBox is a requirement in Bismarck Public Schools, the students will have time to work on DreamBox throughout their daily rotations. While I will assign lessons and activities that align with the specific topic that we are covering this week, when they finish them they can go on to the next activities that DreamBox has lined up for them. Although these activities might not directly relate, any math practice is good math practice. Other skills that they might be covering in DreamBox could relate in an indirect way to measurement and comparing lengths. For example, if they are doing addition and subtraction strategies this would help with measurement and adding different unit amounts. Ultimately anything that keeps the students in a “math brain” is beneficial for this time.

Activity Rotations for the Week:

Each activity here will be explained at the beginning of each day before rotations even begin.

These don't have any assessment opportunities- the main goal is to give the students continual practice on the concept that they are learning throughout the week. .

Monday's Independent Activity: Pipe Cleaner Activity

This activity will be done in partners. Each partnership will have a sheet as listed below and a pile of pipe cleaners. They will grab two different pipe cleaners (of the same color) and determine which one is shorter and which one is longer. If they finish all of the colors, they can start grabbing two pipe cleaners of random colors.

Grab 2 pipe cleaners that are the same color and place the shorter one on the *shorter* side and the longer one on the *longer* side.

Shorter



Longer



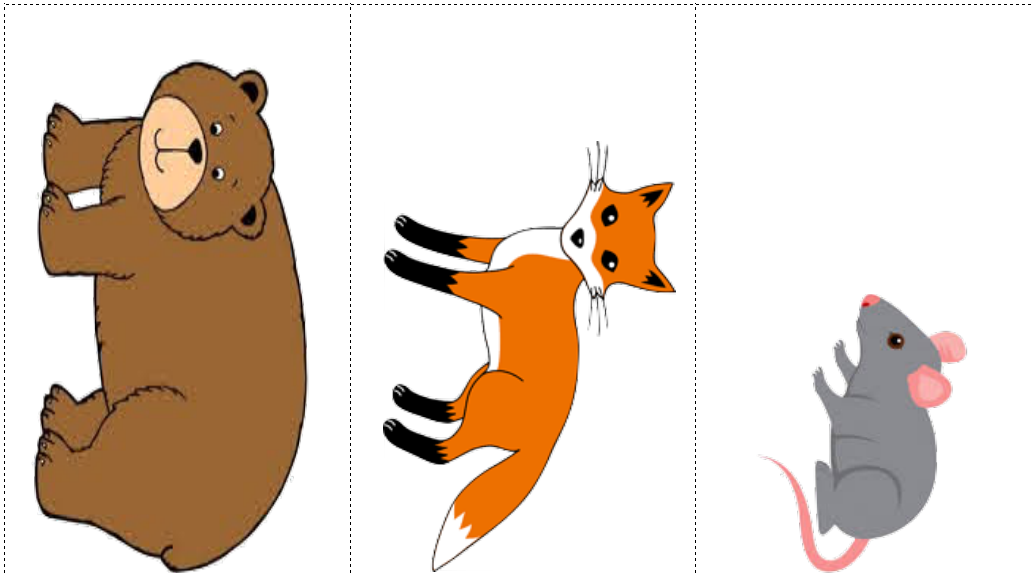
Tuesday's Independent Activity:

During their independent activity the students will complete the following activity. The goal is to cut out the animals and order them from shortest to longest. In the actual PDF the table without the animals and the table with the animals are the exact same size to help the students out.

Cut and paste the objects and order them from shortest to longest.

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<i>Shortest</i>	<i>Medium</i>	<i>Longest</i>
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Wednesday's Independent Activity: Three Object Activity

The students will be given a bin of toys and random objects of some sort (blocks, magnets, etc.- this will be a common manipulative thing so it should work, and I will have it on hand). Then as partners they need to grab three

items out of the bin and order them on this chart. When they finish, they check their partner's work and then do three of their own. Hopefully they can help each other to check it out.

Shortest	The One in the Middle	Longest

Thursday's Independent Activity:

During their independent activity the students will complete the following activity. The goal is to cut out the rockets and order them from shortest to longest. In the actual PDF the table without the rockets and the table with the rockets are the exact same size to help the students out.

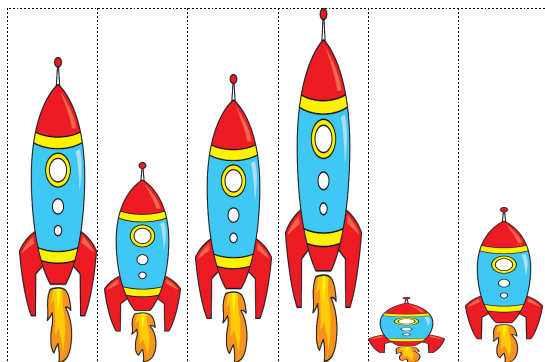
Cut the objects out. Order them by length- shortest to longest.

Group 1- pick at least 3 objects (challenge is 4 of them!)

Group 2- pick at least 4 objects (challenge is 5 of them!)

Group 3- pick at least 5 objects (challenge is all of them!)

Shortest								Longest
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Friday's Independent Activity:

With a partner the students will grab their pencil boxes. They will grab a few different items with their boxes. They will have the following sheet (different for each group) and order the items that they grab from shortest (#1) to longest (5, 7, or 10). Group 3's line is the top one, Group 2 is the middle one, and Group 1 is the bottom one.

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

1	2	3	4	5	6	7
---	---	---	---	---	---	---

1	2	3	4	5
---	---	---	---	---

Table Time for the Week:

Disclaimer: When I have a document shown on this resource it's a screenshot of an actual document that I have saved on another file.

Monday-

Group 1 (Below Grade Level)-

Standard-

- K.MD.1- Compare two objects with a common measurable attribute and describe the difference.

Materials-

- A bunch of random different sized toys and manipulatives (blocks, animal figurines, marbles, counters, stickers, literally anything you can get your hands on that would work well for this)

- The recording sheet (laminated so they can write on it with dry erase markers)
- Dry erase markers
- Dry erase erasers

Directions-

- As they come to the table have some objects in front of them to play with and explore for a minute while waiting out a transition. Make sure that each student has a variety of different things.
- After about a minute, have them put all the objects into the middle of the table, and pass out the recording sheet (pictured below) so each student has one (this sheet is the size of a regular piece of paper)
- Explain that you're going to sort two objects by size. Grab two (somewhat) random objects out of the middle and explain your thinking- "When I look at these two things, I notice that if I set them next to each other, this one appears larger because I can see it over the top of this other thing."
- Then place them on a recording sheet to demonstrate what the students are going to do.
- Grab two (somewhat) random objects out of the middle- make sure they're obviously different sized and lead a discussion about what they notice about the *size* of the objects. Prompt with questions such as:
 - What is different about the size of two objects?
 - Which one would you say is bigger? Why?
 - Which one would you say is smaller? Why?
- Once they have decided as a group where the objects go, place them on the correct spot on the recording sheet.
- Then, give the students the opportunity to do the same for themselves. Tell them that if they get two items that are too close in

size to tell, then they need to put one back and grab another object to compare.

Extension/Challenge Activity-

- *If they finish and seem to really get it, you can have them start to compare the objects within in the bigger column and the smaller column to each other.*

Assessment tool-

- *As they are going through they will be placing items on the sheet shown below. When they finish their charts have them write down their name on the name slot on top (remember, these are laminated and they're using dry erase markers to write their names) and take a picture of each student's work. This will be your record to see if they are understanding the concept. The two objects that they compared should be next to each other horizontally (hence the colored boxes).*

Name: _____

Bigger:

Smaller:

Group 2 (At Grade Level)-

Standard-

- 1.MD.1 Order three objects by length; Compare the lengths of two objects indirectly by using a third object

Materials-

- Unifix Cubes (10 per child)
- Pencils
- Recording Sheets (1 per student)

Directions

- There will be 10 Unifix Cubes on the table for each student.
- Each student will come to the table and begin by playing with the cubes to avoid them wanting to play with them during this lesson (approximately 1.5 minutes/waiting to complete the transition to the table)
- I will have them stack the cubes into three stacks upon completion of their play time. I will model and leave my own stacks for them to look at while they accomplish this task. Number of cubes in stack are as follows: 2, 3, 5
- Have students pick out the shortest stack of the three and put it on the left of their workspace
- Have students pick out the next shortest stack and put it to the right of the shortest one
- Have the students pick out the tallest stack and put on the right of their workspace.
- Have them make observations about the stacks in front of them. Hopefully their using the vocabulary associated with length, but if not, I will remind them of some of their vocabulary words. Prompt them by asking questions such as:
 - Which one is the shortest?
 - Which one is the longest?
 - What can you tell me about the lengths of these stacks?
- Have them mix up their stacks and reorder them by length on their own this time.
- Ask them to switch their stacks into the following amounts: 1, 3, 6 and reorder these again.

- If I have time, I will extend their activity or challenge them with the extension listed below.
- I will them fill out the recording sheet (pictured below) when they have about 3 minutes left by tracing their final three stacks in their order of shortest to longest.

Extension/Challenge Activity-

- Introduce 5 more cubes per student and have them make their own stacks and order those stacks by length
- Have them combine with a partner and order more than 3 stacks by length

Assessment tool-

- Recording Sheet Shown Below:

Name: _____

Shortest		Longest

Group 3 (Above Grade Level)-

Standard-

- 1.MD.1 Order three objects by length; Compare the lengths of two objects indirectly by using a third object

Materials-

- Legos
- Blocks
- Pencils (variety of lengths)

Directions-

- They will come to the table and begin by playing with the Legos that will be set out at their individual spots at the table
- After about a minute of playing with the Legos, I will ask them to stack the Legos into three different size stacks of their choice.
- I will demonstrate ordering the Legos from shortest to longest and ask them to do the same.
- They will then switch stacks with the person sitting next to them and order their partner's Lego stacks in order of shortest to longest.
- I will then take their Legos and bring out 3 different size blocks.
- I will instruct them to put their blocks in order from longest to shortest. (For this one the blocks should be laid down on the table, so they aren't tall but rather long- demonstrate this for them and direct/help as needed)
- Once they have had the opportunity to order the blocks, have them check their partner's work and adjust as needed.
- Take the blocks away and introduce a variety of different sized pencils. Each student gets 3 pencils and has to order them by shortest to longest.
- If there's still have time, I will challenge them with the activity listed below.
- When there are 2 minutes remaining, have them use the same recording sheet from the previous day and document their pencils (I will model this so that it's correct) by laying the eraser down on the

bottom line of the table and drawing a line where the point of the pencil reaches.

Extension/Challenge Activity-

- Put 4 different objects in order of shortest to longest

Assessment tool-

- Recording sheet

Name: _____

Shortest		Longest

Tuesday-

Group 1 (Below Grade Level)-

Standard-

- K.MD.1- Compare two objects with a common measurable attribute and describe the difference.

Materials-

- *Objects (2 of each) that are easy to compare lengths of (strings with beads, Lego stacks, different sized pencils, different sized crayons- but make sure that each one is a different color for later)*
- *Recording Sheet*
- *Pencils*

Directions-

- *As they come to the table have two objects in front of them to play with and explore for a minute while waiting out a transition.*
- *When it's time to begin, have them put the two objects in front of them next to each other (demonstrate this as needed) and have a discussion about what they notice about the objects in front of them. Prompt with questions such as:*
 - *What is the same about these objects?*
 - *What is the difference?*
- *Through the discussion they should be able to demonstrate their understanding that one object is longer than the other- they might use the words bigger and smaller, but have them expand on what they mean and guide them to the words "longer" and "shorter"*
- *Next, demonstrate what you want them to do for the assessment tool which including writing down which color items belongs in each box.*
- *Next, have them write down which color item belongs in which box on the assessment tool shown below.*
- *Once they have finished, have them switch objects by passing their objects to the left. They will get two new objects and do the same thing. Give them approximately two minutes per item and have a discussion about what they are noticing about the objects.*
- *As they're doing this, ask questions such as:*
 - *Why did you put that one in that box?*
 - *How do you know that this one is longer than that one?*

- How can you determine which one is longer?

Extension/Challenge Activity-

- Have them compare different objects (the string beads with a crayon) and determine which one is longer and shorter.

Assessment tool-

- As they go through the activity, they will fill this out. In preparation it's imperative that the colors that they write down won't double for another object- for example, I can't have a purple marker and a purple crayon because if they write purple on the sheet I will not know which object they are specifically referring to.

Name: _____

Longer	Shorter

Group 2 (At Grade Level)-

Standard-

- 1.MD.1 Order three objects by length; Compare the lengths of two objects indirectly by using a third object

Materials-

- Legos
- Blocks
- Pencils (variety of lengths)

Directions-

- They will come to the table and begin by playing with the Legos that will be set out at their individual spots at the table
- After about a minute of playing with the Legos, I will ask them to stack the Legos into three different size stacks of their choice.
- I will demonstrate ordering the Legos from shortest to longest and ask them to do the same.
- They will then switch stacks with the person sitting next to them and order their partner's Lego stacks in order of shortest to longest.
- I will then take their Legos and bring out 3 different size blocks.
- I will instruct them to put their blocks in order from longest to shortest. (For this one the blocks should be laid down on the table, so they aren't tall but rather long- demonstrate this for them and direct/help as needed)
- Once they have had the opportunity to order the blocks, have them check their partner's work and adjust as needed.
- Take the blocks away and introduce a variety of different sized pencils. Each student gets 3 pencils and has to order them by shortest to longest.
- If there's still have time, I will challenge them with the activity listed below.
- When there are 2 minutes remaining, have them use the same recording sheet from the previous day and document their pencils (I will model this so that it's correct) by laying the eraser down on the bottom line of the table and drawing a line where the point of the pencil reaches.

Extension/Challenge Activity-

- Put 4 different objects in order of shortest to longest

Assessment tool-

- Recording sheet

Name: _____

Shortest		Longest

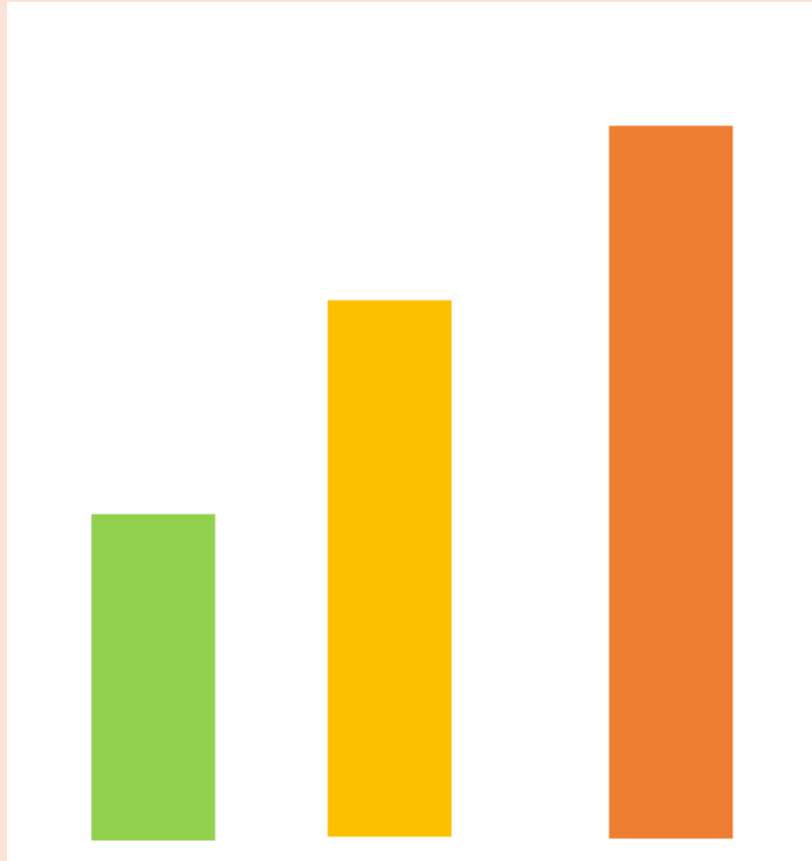
Group 3 (Above Grade Level)-

Standard-

- 1.MD.1 Order three objects by length; Compare the lengths of two objects indirectly by using a third object

Materials-

- *This sheet in a dry erase sleeve: One copy for each student.*

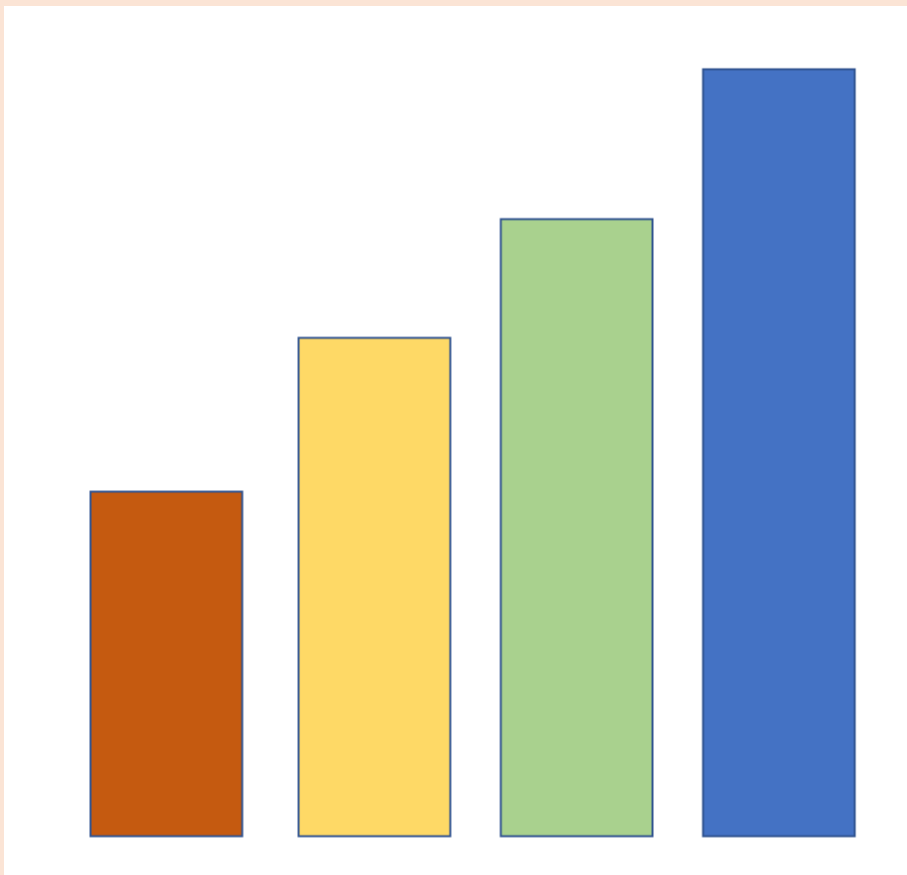


- *Dry erase makers (one per student)*
- *Dry erase erasers (one per student)*

Directions-

- *The sheet pictured above should be available for each student.*
- *As they come to the table start asking questions to refresh their memories such as:*
 - *which colored rectangle is the longest?*
 - *Which colored rectangle is the shortest?*
 - *Which colored rectangle is in the middle?*
- *Next, I will explain that I'm thinking of one of the rectangles that they have in front of them. Once they figure out which one I'm thinking of, then they should put a dot on it, so I can see whether they figured it out.*

- To get them started, I will say, “The rectangle I’m thinking of is not orange, and it’s not yellow.” They should put a dot on the green one.
- Now that they have the hang of it, switch to length by saying, “The rectangle that I’m thinking of is longer than the yellow one.” They should put a dot on the orange one.
- Proceed with the following statements or similar ones:
 - I’m thinking of a rectangle that is longer than both the green one and the yellow one.
 - I’m thinking of a rectangle that is shorter than the orange one, but longer than the green one.
- Once they get the hang of it, have them flip the sheet over which will have this on it:



- Continue the games by asking:
 - I’m thinking of a rectangle that is shorter than the yellow one.

- I'm thinking of a rectangle that is longer than the orange one, but shorter than the green one.
- I'm thinking of a rectangle that is shorter than the blue one, longer than the orange one, and longer than the yellow one.
- I'm thinking of a rectangle that is longer than the orange one, longer than the yellow, and longer than the green one.
- Ask these questions are being asked with more than three rectangles mentioned and the students are considering the outcomes, take the time to check in and ask- "What are my options right now? How does that change with this next statement?"

Extension/Challenge Activity-

- As they are finishing up, give them the opportunity to come up with riddles for the people within the group and do the same thing but with partners instead of with the teacher.

Assessment tool-

- I will have a sheet of paper next to me with the name of each student in the group. As they are getting the answers wrong I will add a tally mark next to their name so I know who's not getting it and how often they are getting the wrong answer.

Wednesday-

Group 1 (Below Grade Level)-

Standard-

- 1.MD.1 Order three objects by length; Compare the lengths of two objects indirectly by using a third object

Materials-

- Unifix Cubes (10 per child)
- Pencils

- *Recording Sheets (1 per student)*

Directions

- *Have 3 stacks of Unifix Cubes per student set up as follows: a stack of 3, a stack of 5, and a stack of 7.*
- *Each student will come to the table and begin by playing with the cubes to avoid them wanting to play with them during this lesson (approximately 1.5 minutes/waiting to complete the transition to the table)*
- *Make sure to emphasize that they can play with the stacks but that they shouldn't take the stacks apart.*
- *Have them place the stacks at the top of their workspace and leave them alone. Using three stacks of my own, I will then place them in order of shortest to longest for the students to see and demonstrate my own thinking as I do this.*
- *Have students pick out the shortest stack of the three and put it on the left of their workspace*
- *Have students pick out the next shortest stack and put it to the right of the shortest one*
- *Have the students pick out the tallest stack and put on the right of their workspace.*
- *Have them make observations about the stacks in front of them. Hopefully their using the vocabulary associated with length, but if not, I will remind them of some of their vocabulary words. Prompt them by asking questions such as:*
 - *Which one is the shortest?*
 - *Which one is the longest?*
 - *What can you tell me about the lengths of these stacks?*
- *Have them mix up their stacks and reorder them by length on their own this time.*

- Ask them to switch their stacks into the following amounts (and demonstrate for the visual): 2, 6, 7 and reorder these again.
- If I have time, I will extend their activity or challenge them with the extension listed below.
- I will them fill out the recording sheet (pictured below) when they have about 3 minutes left by tracing their final three stacks in their order of shortest to longest.

Extension/Challenge Activity-

- Have the students make their own stacks and order those stacks by length
- Have them combine with a partner and order more than 3 stacks by length

Assessment tool-

Name: _____

Shortest		Longest

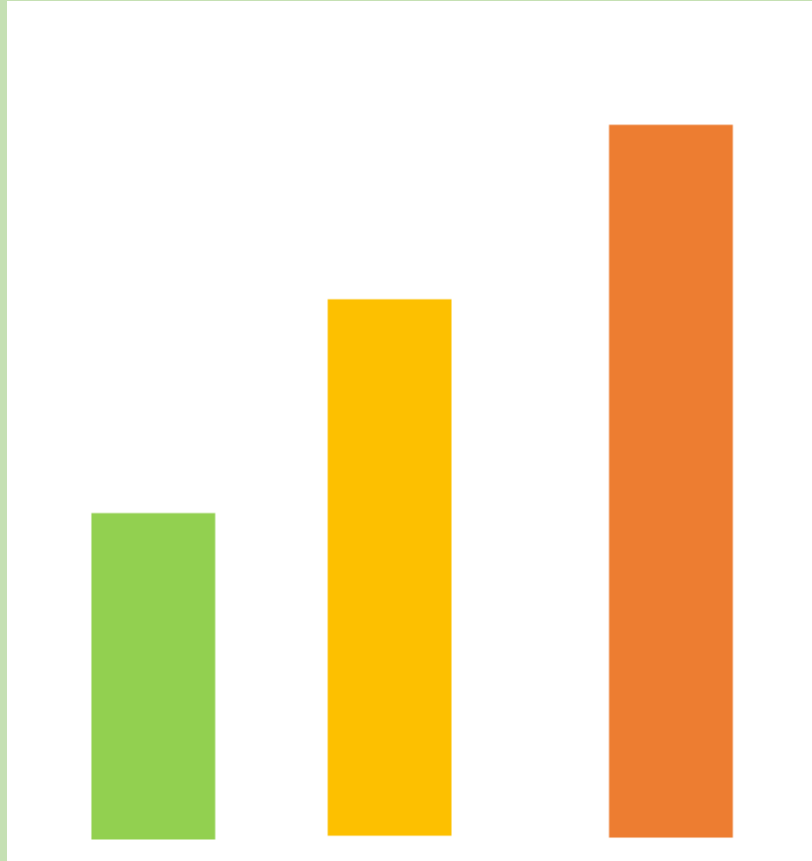
Group 2 (At Grade Level)-

Standard-

- *1.MD.1 Order three objects by length; Compare the lengths of two objects indirectly by using a third object*

Materials-

- *This sheet in a dry erase sleeve: One copy for each student.*



- *Dry erase makers (one per student)*
- *Dry erase erasers (one per student)*

Directions-

- *The sheet pictured above should be available for each student.*
- *As they come to the table start asking questions to refresh their memories such as:*
 - *which colored rectangle is the longest?*
 - *Which colored rectangle is the shortest?*
 - *Which colored rectangle is in the middle?*
- *Next, I will explain that I'm thinking of one of the rectangles that they have in front of them. Once they figure out which one I'm*

thinking of, then they should put a dot on it, so I can see whether they figured it out.

- To get them started, I will say, "The rectangle I'm thinking of is not orange, and it's not yellow." They should put a dot on the green one.
- Now that they have the hang of it, switch to length by saying, "The rectangle that I'm thinking of is longer than the yellow one." They should put a dot on the orange one.
- Proceed with the following statements or similar ones:
 - I'm thinking of a rectangle that is longer than both the green one and the yellow one.
 - I'm thinking of a rectangle that is shorter than the orange one, but longer than the green one.
 - I'm thinking of a rectangle that is the shortest.
 - I'm thinking of a rectangle that is the longest.
 - I'm thinking of a rectangle that is shorter than the orange one and shorter than the yellow one.
- Have them think of a I'm thinking of.. relating to length and share it with the class.

Extension/Challenge Activity-

- On the backside of the image shown above, have the one that is listed here. If they're getting bored with it I will have them flip over this one and ask the questions above again.



Assessment tool-

- *I will have a sheet of paper next to me with the name of each student in the group. As they are getting the answers wrong, I will add a tally mark next to their name, so I know who's not getting it and how often they are getting the wrong answer.*

Group 3 (Above Grade Level)-

- *1.MD.2- Demonstrate understanding that the length measurement of an object is the number of same-size length units that span the object with no gaps or overlaps. Measure and express the length of an object using whole non-standards units.*

Materials-

- *Unifix Cubes*
- *Multiple (20+) strips of paper cut to different lengths*
- *Plain white paper*
- *Pencils*

Directions-

- *Have the Unifix Cubes out at the table for the students to start playing with while the transition to the table is finishing.*
- *After about a minute explain that today they are going to move on from comparing lengths to measuring lengths.*
- *Demonstrate how they are going to take a piece of paper and lay it down on the table*
- *Once the paper is on the table use Unifix cubes to measure the length of the paper*
- *Make sure to demonstrate the importance of connecting the Unifix cubes so that there are no gaps or overlaps.*
- *Let the students freely measure and explore the strips of paper and the Unifix cubes.*
- *When time is starting to wind down, have the students trace both a piece of a paper and the stack of Unifix cubes that they used to determine the measurement of it next to each other. On their tracing they will also mark the individual Unifix cubes by putting a line where the cubes separate.*

Extension/Challenge Activity-

- *Bring out some material that bends and moves (such as string) for them to measure to emphasize the importance of keeping the string tight while measuring.*

Assessment tool-

- *Their tracing of the piece of paper and the Unifix cubes (this will be done on a blank sheet of white paper with their name written at the top) will show how accurately they can measure and give an idea of whether or not there needs to be more explanation the next day.*

Thursday-

Group 1 (Below Grade Level)-

Standard-

- 1.MD.1 Order three objects by length; Compare the lengths of two objects indirectly by using a third object

Materials-

- Legos
- Blocks
- Pencils (variety of lengths)

Directions-

- They will come to the table and begin by playing with the Legos that will be set out at their individual spots at the table
- After about a minute of playing with the Legos, I will ask them to stack the Legos into three different size stacks of their choice.
- I will demonstrate ordering the Legos from shortest to longest and ask them to do the same.
- They will then switch stacks with the person sitting next to them and order their partner's Lego stacks in order of shortest to longest.
- I will then take their Legos and bring out 3 different size blocks.
- I will instruct them to put their blocks in order from longest to shortest. (For this one the blocks should be laid down on the table, so they aren't tall but rather long- demonstrate this for them and direct/help as needed)
- Once they have had the opportunity to order the blocks, have them check their partner's work and adjust as needed.
- Take the blocks away and introduce a variety of different sized pencils. Each student gets 3 pencils and has to order them by shortest to longest.
- If there's still have time, I will challenge them with the activity listed below.

- When there are 2 minutes remaining, have them use the same recording sheet from the previous day and document their pencils (I will model this so that it's correct) by laying the eraser down on the bottom line of the table and drawing a line where the point of the pencil reaches.

Extension/Challenge Activity-

- Put 4 different objects in order of shortest to longest

Assessment tool-

- Recording sheet

Name: _____

Shortest		Longest

Group 2 (At Grade Level)-

Standard-

- 1.MD.1 Order three objects by length; Compare the lengths of two objects indirectly by using a third object

Materials-

- Color coded stacks of Unifix cubes (3/4 stacks per partnership)

Directions-

- Remind them of what we did the day before by showing the sheet with the three rectangles and saying, "I'm thinking of a rectangle that is shorter than the orange one but longer than the green one," and see who gets it.
- Then explain that today they will be working with a partner to do the same thing but with Unifix cube stacks
- They will take turns going back and forth making statements about the stacks.
- As I assess where they are (tool listed below) change up the partnerships if needed so students that get it can excel and move on to the challenge activity. For those that don't quite get it yet I will provide additional support and scaffold until they are doing it independently.

Extension/Challenge Activity-

- Give them another stack of Unifix cubes and have them do the same thing but with four stacks instead of 3.

Assessment tool-

- Take time to tune in to each group individually and see each student make the statement and guess the rectangle. Make notes (on a side piece of paper) of which students seem to really get the concept and which ones don't.

Group 3 (Above Grade Level)-

Standard-

- 1.MD.2- Demonstrate understanding that the length measurement of an object is the number of same-size length units that span the object with no gaps or overlaps. Measure and express the length of an object using whole non-standards units.

Materials-

- Paperclips
- Multiple (20+) pieces of string cut to different lengths
- Plain white paper
- Pencils

Directions-

- Explain that today they are going to continue practicing measurement, but with paper clips instead of Unifix Cubes
- Demonstrate how they are going to take a piece of string and lay it down on the table- emphasize the importance of stretching the string tight and demonstrate how you can get different lengths if you do it incorrectly.
- Once the string is on the table stretched tight use paperclips to measure the length of the paper
- Make sure to demonstrate the importance of having the paperclips touch so that there are no gaps or overlaps.
- While doing this have both good example of measuring with paperclips and examples that have gaps and overlaps
- Lead a discussion on why the gaps and overlaps aren't correct
- Let the students freely measure and explore the strings and the paperclips.
- When time is starting to wind down, have the students document their measuring by having them place a line at the start of the piece of string and the end of the string. Have them mark how each paperclip that goes along the length of string.
- The easiest way to do this is:
 - Start with one paper clip at the bottom of the string. Put a line at the bottom of the paper clip and the top of the paperclip.
 - Move the paperclip up so that the bottom of the paperclip is touching the line that marked the top.
 - Draw a line at the new top of the paperclip.

- Repeat until you have the length of the string documented.

Extension/Challenge Activity-

- Start counting the number of paperclips and use the phrase “This string is ## paper clips long”

Assessment tool-

- The documentation of their learning done at the end of the activity will serve as an assessment for this activity. By looking at these tracings I will be able to determine if there are any gaps or overlaps in their measuring of the pieces of string.

Friday-

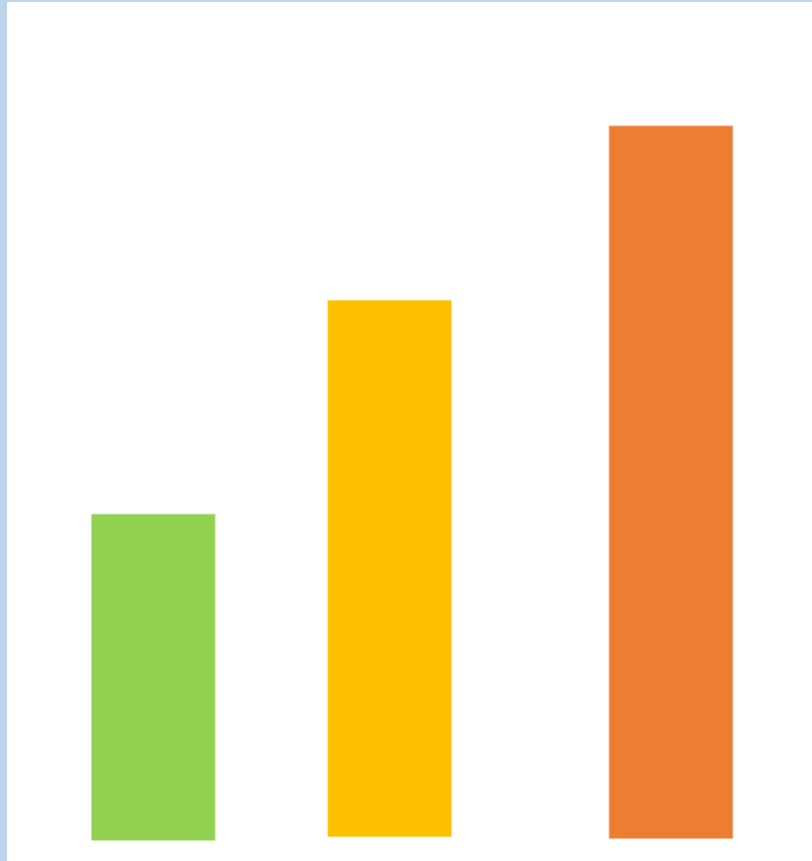
Group 1 (Below Grade Level)-

Standard-

- 1.MD.1 Order three objects by length; Compare the lengths of two objects indirectly by using a third object

Materials-

- *This sheet in a dry erase sleeve: One copy for each student.*



- *Dry erase makers (one per student)*
- *Dry erase erasers (one per student)*

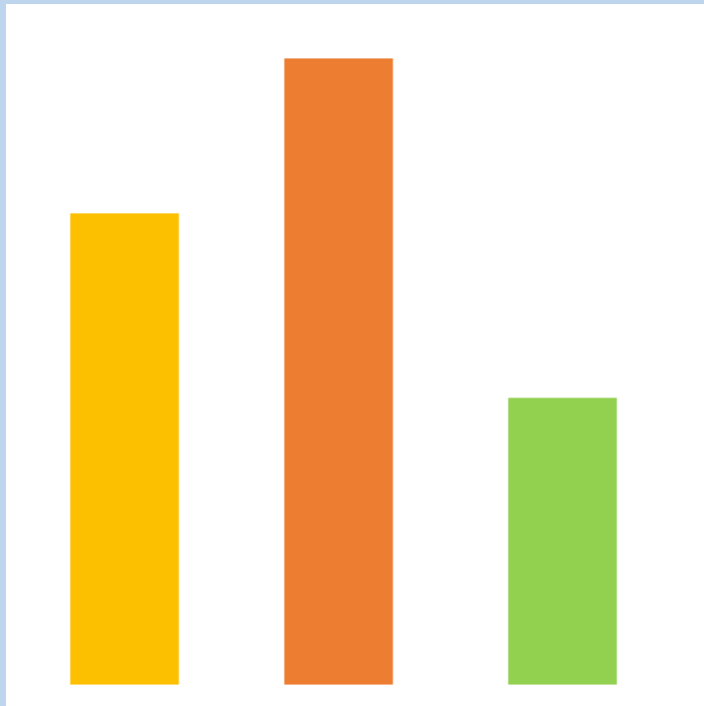
Directions-

- *The sheet pictured above should be available for each student.*
- *As they come to the table start asking questions to refresh their memories such as:*
 - *which colored rectangle is the longest?*
 - *Which colored rectangle is the shortest?*
 - *Which colored rectangle is in the middle?*
- *Next, I will explain that I'm thinking of one of the rectangles that they have in front of them. Once they figure out which one I'm thinking of, then they should put a dot on it, so I can see whether they figured it out.*

- To get them started, I will say, "The rectangle I'm thinking of is not orange, and it's not yellow." They should put a dot on the green one.
- Now that they have the hang of it, switch to length by saying, "The rectangle that I'm thinking of is longer than the yellow one." They should put a dot on the orange one.
- Proceed with the following statements or similar ones:
 - I'm thinking of a rectangle that is longer than both the green one and the yellow one.
 - I'm thinking of a rectangle that is shorter than the orange one, but longer than the green one.
 - I'm thinking of a rectangle that is the shortest.
 - I'm thinking of a rectangle that is the longest.
 - I'm thinking of a rectangle that is shorter than the orange one and shorter than the yellow one.
- Have them think of a I'm thinking of.. relating to length and share it with the class.

Extension/Challenge Activity-

- On the backside of the image shown above, have the one that is listed here. If they're getting bored with it I will have them flip over this one and ask the questions above again.



Assessment tool-

- *I will have a sheet of paper next to me with the name of each student in the group. As they are getting the answers correct, I will add a tally mark next to their name, so I know how many they are getting. If I notice that most of them are getting it and it would be easier/quicker, I will add a tally mark for the ones who get it wrong instead, so I know who's not quite getting it and who is.*

Group 2 (At Grade Level)-

Standard-

- *1.MD.2 Demonstrate understanding that the length measurement of an object is the number of same-size length units that span the object with no gaps or overlaps, Measure and express the length of an object using whole non-standard units.*

Materials-

- *Unifix Cubes (the whole box)*

- A bunch of random things from around the room that will fit on a piece of paper (blocks, pencils, erasers, manipulatives, crayons, etc.)

Directions-

- I will have three of the random objects set out in front of me.
- I will begin by demonstrating how to measure the lengths of each object using Unifix cubes.
- I will then give each student a pile of Unifix cubes and three objects from my random collection
- They will get the opportunity to explore measure each object with Unifix cubes.
- As they have a stack of Unifix cubes that represent the length of each of their 3 objects, they will order the stacks of Unifix cubes in order by shortest to longest.
- Have them record at least 2 of the objects on the assessment sheet as described below.

Extension/Challenge Activity-

- Start to introduce the idea of “this object is 4 Unifix Cubes long” and have them write down the length of each object in number of Unifix cubes on their recording sheet (described below).

Assessment tool-

- Using the following recording sheet, the students will trace the object they are measuring as well as the Unifix cube stack that they used to measure the objects. For those who were able to move onto the challenge, they will write down the number of Unifix cubes in the tracing of the stack.

Name: _____

Object 1

Unifix Cube Length 1

Object 2

Unifix Cube Length 2

Group 3 (Above Grade Level)-

Standard-

- *1.MD.2- Demonstrate understanding that the length measurement of an object is the number of same-size length units that span the object with no gaps or overlaps. Measure and express the length of an object using whole non-standards units.*

Materials-

- *Paperclips*
- *Unifix Cubes*
- *Scissors*
- *This sheet: enough for one per student*



Directions-

- *When the students come to the table have them begin by cutting out the colorful strips out of their piece of paper shown above.*
- *Mix all the strips up and put them in the center of the table*
- *Have students pull out random strips from the middle and practice their measuring. This time, they get the choice of measuring with paperclips or Unifix cubes.*
- *Let them freely continue to explore and practice measuring.*

- While they are measuring gradually start asking “How many paperclips long is that line?” or “How many Unifix cubes long is that line?”
- With about 3 minutes left of the rotation, take away the colorful strips of paper and give each student a sheet with the lines on. (located in the Assessment tool).
- Explain that when they measure the lines, they need to count how many paperclips and Unifix cubes long each line is and document according.

Extension/Challenge Activity-

- Have the students brainstorm some other items that they could use to measure the strips of paper and experiment with these items.
- If necessary, take it one step further and ask what would happen if they had to measure something as long as the table or as tall as a person. What type of unit would they use to measure?

Assessment tool-

- This recording sheet will work as the assessment tool for this activity. By looking at the numerical responses of the students for this activity it will be able to see who understands the concept of adding a number to the measurement.

Name: _____



____ Paperclips Long
____ Unifix Cubes Long



____ Paperclips Long
____ Unifix Cubes Long



____ Paperclips Long
____ Unifix Cubes Long



____ Paperclips Long
____ Unifix Cubes Long