

Name: \_\_\_\_\_

**Math 7/Science Checklist: Q3 W 3-4 January 29th- February 9th**

**Big Ideas:**

|   |  |
|---|--|
| <p align="center"><b>Math: Algebraic Reasoning</b></p> <ul style="list-style-type: none"> <li>● Solving Two-Step Equations</li> <li>● Solving Multi-Step Equations</li> <li>● Translate Expressions and Equations</li> <li>● Writing an Expression or Equation</li> </ul> | <p align="center"><b>Science:</b></p> <ul style="list-style-type: none"> <li>● Rock Cycle</li> <li>● Plate Tectonics</li> <li>● Relative dating</li> </ul> |
|---|--|

**Upcoming Dates:**

| <u>Week 1</u>  | <u>Week 2</u>   |
|--|---|
| <input type="checkbox"/> <u>1/30</u> : - Q3W1&2 works due<br><input type="checkbox"/> <u>2/2</u> : - Rock Cycle Presentation due | <input type="checkbox"/> <u>2/7</u> : Wednesday, Early Release<br><input type="checkbox"/> <u>2/9</u> : - Math Study guide Due for Assessment on 2/16<br><input type="checkbox"/> <u>2/9</u> : Persuasive Essay and Water Quality Lab Due |

**Shelfwork: Show All Work. Explore work is to be checked against the control and then marked complete. Complete individually unless noted with a "G"**

| Lesson  | Explore   | Expand   | Extend   |
|---|---|--|--|
| <input type="checkbox"/> Plate tectonics Video Homework<br><input type="checkbox"/> Check In 1/29 | <input type="checkbox"/> <b>Choose 1:</b><br>Plate Tectonics Versatiles (___✓, M, 0)<br><input type="checkbox"/> Plate Tectonics Concept Map (___✓, M, 0) | <b>All Do:</b><br><input type="checkbox"/> Plate Tectonic Paper Lab (___%) | <input type="checkbox"/> Water Quality Lab Persuasive Essay (see directions and rubric) (___%) |

Work plan:

Time Estimate:

|  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> Multit-step equations<br><input type="checkbox"/> Check In 1/31 | <input type="checkbox"/> What did the Farmer do? (G)(___✓, M, 0)<br><b>OR</b><br><input type="checkbox"/> Expression and Equation Stations, 1, 2 & 4 (G) (___✓M,0) | <input type="checkbox"/> Purple Book 5.2 p. 135 (___%) | <input type="checkbox"/> Create AND teach a green product card (use Extend rubric)(___%)<br><b>OR</b><br><input type="checkbox"/> Choice Appyl, p. 137, 147, or 159(___%) |
|--|--|--|---|

Work plan:

Time Estimate:

|  |  |  |   |
|--|--|--|---|
| <input type="checkbox"/> Relative Dating<br><input type="checkbox"/> Check In 2/01 | <b>All Do:</b><br><input type="checkbox"/> Which Rock Layer Formed First (Part I)? | <b>All Do:</b><br><input type="checkbox"/> Which Rock Layer Formed First (Part II)? (___%) | <input type="checkbox"/> Water Quality Lab Persuasive Essay (Do re-loop first--see directions and rubric) |
|--|--|--|---|

Work plan:

Time Estimate:

|  |   |   |   |
|--|---|---|---|
| <input type="checkbox"/> Translating and writing expressions and equations Video<br><input type="checkbox"/> Check In 2/05 | <input type="checkbox"/> Solving Multi-Step equation Word Problems (Even or Odd) (___✓, M, 0)<br><input type="checkbox"/> Writing Equations 1&2 (Even or Odd)(___✓, M, 0) | <input type="checkbox"/> Purple Book 5.3 p.145 (___%) | <input type="checkbox"/> Create AND teach a green product card (use Extend rubric (___%)<br><b>OR</b><br><input type="checkbox"/> Choice Appyl, p. 137, 147, or 159(___%) |
|--|---|---|---|

Work plan:

Time Estimate:

|  |   |  |   |
|--|---|--|---|
| <input type="checkbox"/> Equation review Lessons | <b>Choose 1:</b><br><input type="checkbox"/> 2-2 Game: Equation Challenge (Do twice)(G) (___✓, M, 0)<br><input type="checkbox"/> Slow Skier(___✓, M, 0)<br><input type="checkbox"/> Butcher Say? (___✓, M, 0) | <b>All do:</b><br><input type="checkbox"/> Study Guide. (___%) | <input type="checkbox"/> Create AND teach a green product card (use Extend rubric (___%)<br><b>OR</b><br><input type="checkbox"/> Choice Appyl, p. 137, 147, or 159(___%) |
|--|---|--|---|

Work plan:

Time Estimate:

|                                  |   |
|----------------------------------|---|
| <input type="checkbox"/> Re-loop | <input type="checkbox"/> Water Quality Lab (to be completed over the course of the checklist). (___✓, M, 0) |
|----------------------------------|---|

**Homework:** (All assignments are to be done independently and are due the next day unless noted):

- Monday 1/29: Complete any missing assignments from weeks 1&2
- Tuesday 1/30: **Multistep Equations** with guided notes on EdPuzzle
- Wednesday 1/31: **Relative Dating** video with guided notes on EdPuzzle
- Thursday 2/01: **Translating and writing expressions and equations** video on EdPuzzle with guided notes
- Friday 2/02: Review and organize binder and complete missing work as needed
- Monday 2/05: with guided notes on EdPuzzle
- Tuesday 2/06: complete missing assignments. Remember, **early release tomorrow!**
- Wednesday 2/07: Complete missing assignments and **Finish Study Guide** for check in on Monday.
- Thursday 2/08: **Translating and Writing Inequalities** for check in on Monday.
- Friday 2/09: Review and organize binder (Math and Science) and/or complete missing assignments

Lesson Requests:

\_\_\_\_\_

\_\_\_\_\_

Notes and formulas:

By the end of this lesson you will be able to

---

Example 1 - Solving equations using 3 math operations

$$\frac{2x}{5} - 12 = 8$$

---

---

---

---

What do I need to do?

1. 

---
2. 

---
3. 

---
4. 

---

What three operations did you use to solve this equation? \_\_\_\_\_, \_\_\_\_\_, and

---

Example 2 - Solve Equations with Like Terms on Opposite Sides

$$4x - 9 = 7 - 2x$$

---

---

---

What do I need to do?

1. 

---
2. 

---
3. 

---

Example 3 - Solve Equations with the Distributive Property

$$3(x - 7) = 9$$

---

---

---

---

What do I need to do?

1. 

---
2. 

---
3. 

---
4. 

---

Example 4 - Solve Equations with Like Terms and Distributive Property

$$(x - 3) - 9x = 7$$

---

---

---

---

What do I need to do?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

SHOWTIME - You Try!

Solve for the variable  $x$  in the equation.

1)  $4x - 10 = 6x$

2)  $5(x - 7) = 16$

3)  $\frac{5x}{2} - 7 = 12$

4)  $4(2 - x) - 2x = 10$

Name: \_\_\_\_\_ Unit: \_\_\_\_\_  
 Date: \_\_\_\_\_

## Relative and Absolute Dating Guided Notes

**Cues:**

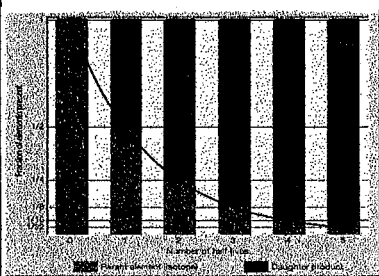
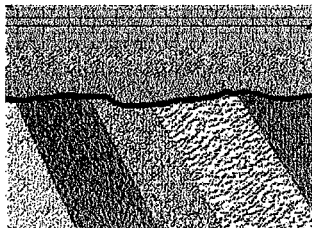
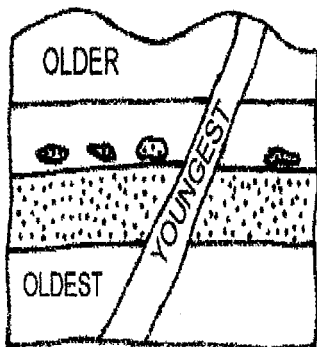
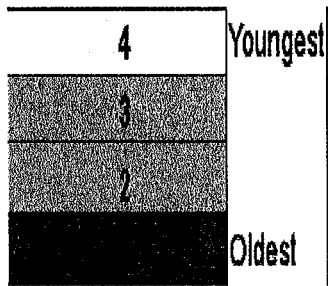
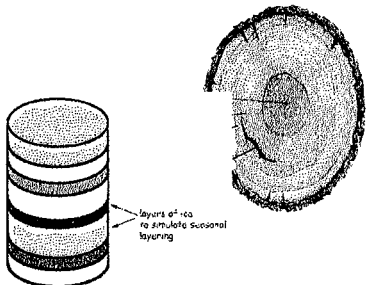


Figure 12-2



**Geologic Time:**

- Rocks record geologic events and the changing \_\_\_\_\_ forms of the past.
- Uniformitarianism: The forces and processes that we observe today have been at work for a very long time.

**Relative Dating:**

- Tells us the sequence ( \_\_\_\_\_ ) in which events occurred, but NOT HOW LONG AGO they occurred.

**\*3 Laws/Principles:**

1. **Law of Superposition:** In an undisturbed sequence of \_\_\_\_\_ rocks, each bed is older than the one above it and younger than the one below it.
2. **Principle of Original Horizontality:** Layers of sediment are generally deposited in a \_\_\_\_\_ position.
3. **Principle of Cross-Cutting Relationships:** States that when a fault cuts through or when magma intrudes into other rocks and crystallizes, we can assume that the fault or intrusion is \_\_\_\_\_ than the rocks affected.
  - Inclusion: Pieces of rock units that are contained within another (are younger than the rock they are in).
  - Unconformity: a \_\_\_\_\_ in the geologic record that occurs when rock is \_\_\_\_\_, exposing older rock and then new rock forms on the much older exposed rock.

**Absolute Dating:**

- Three Types: 1. Radiometric 2. Tree Ring 3. Ice Core

**Radiometric Dating:**

- Radiometric Dating: Calculating the age of rocks and minerals that contain certain \_\_\_\_\_ isotopes.
- Uses the half-lives of those isotopes to calculate the age of rocks.
- Half-Life: The time it takes for \_\_\_\_\_ % (1/2) of the nuclei in a radioactive sample to \_\_\_\_\_ to its stable isotope.
- Multiply the number of half-lives by the half-life time to get the age of a fossil.
- This method is possible because each radioactive isotope decays at a \_\_\_\_\_ rate.
- Cannot be used for sedimentary rocks because they are formed from many pieces of older rocks, so there would be many ages of rocks.

**Tree Ring Dating:**

- Tree rings are a glimpse into the past.
- Width of bands indicate \_\_\_\_\_ changes and number of rings indicate age.
- Must use a sample to be sure the results are accurate.

**Ice Core Dating:**

- Each layer of ice in a core corresponds to a single \_\_\_\_\_, or sometimes even a single season and most everything that fell in the snow that year remains behind, including wind-blown dust, ash, atmospheric \_\_\_\_\_ and even radioactivity.

By the end of this lesson you will be able to

---

List three words that represent each of the four math operations.

1) Addition \_\_\_\_\_

2) Subtraction \_\_\_\_\_

3) Multiplication \_\_\_\_\_

4) Division \_\_\_\_\_

Example 1 - Seven more than some number is equal to nine. What is the number?

What do I need to do?

- 1. \_\_\_\_\_
  - 2. \_\_\_\_\_
  - 3. \_\_\_\_\_
  - 4. \_\_\_\_\_
- 
- 
- 

Example 2 - The length of a rectangle is twice as long as the width. The perimeter of the rectangle is equal to 36 meters. What are the dimensions of the rectangle?

What do I need to do?

- 1. \_\_\_\_\_
  - 2. \_\_\_\_\_
  - 3. \_\_\_\_\_
  - 4. \_\_\_\_\_
  - 5. \_\_\_\_\_
- 
- 
- 
-

Example 3 - Set up an equation with variables on both sides

Sam and Richard are the same age. Sam is five times Jessica's age. Richard is twelve years older than Jessica's age. How old are Sam, Richard, and Jessica?

What do I need to do?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

SHOWTIME - You Try!

Read each problem carefully and create an equation in order help you solve each problem.

- 1) Five times some number is the same as sixteen more than the same number. What is the number?
  
  
  
  
  
  
  
  
  
  
- 2) The perimeter of a square is 48 cm. What is the length of each side?
  
  
  
  
  
  
  
  
  
  
- 3) Joseph is four years older than Mel. Rob is twice as old as Joseph. Rob and Mel are twins. How old are each of the boys?

By the end of this lesson you will be able to \_\_\_\_\_

Example 1 - How are inequalities used to compare values?

What is an *inequality*? - \_\_\_\_\_  
 \_\_\_\_\_


Draw the *greater than* symbol \_\_\_\_\_ Draw the *less than* symbol \_\_\_\_\_

The inequality symbol is always open to \_\_\_\_\_

Draw the *greater than or equal to* symbol \_\_\_\_\_ Draw the *less than or equal to* symbol \_\_\_\_\_

Problems:

1. \_\_\_\_\_  \_\_\_\_\_

3. \_\_\_\_\_  \_\_\_\_\_

2. \_\_\_\_\_  \_\_\_\_\_

4. \_\_\_\_\_  \_\_\_\_\_

Example 2 Match the inequality to the situation

What do I need to do?

Step 1. \_\_\_\_\_

Step 2. \_\_\_\_\_

Step 3. \_\_\_\_\_

- $x < 45$        $x \leq 45$        $x > 45$        $x \geq 45$

- To ride the rollercoaster you must be at least 45 inches tall. \_\_\_\_\_
- The speed limit is 45 miles an hour. \_\_\_\_\_
- You need more than 45 votes to win. \_\_\_\_\_
- The show needs to be under 45 minutes. \_\_\_\_\_



Example 3 - Write an inequality to represent each situation.

What do I need to do?

Step 1. \_\_\_\_\_

Step 2. \_\_\_\_\_

Step 3. \_\_\_\_\_

Step 4. \_\_\_\_\_

- You must be at least 16 to get your driver's license. \_\_\_\_\_
- The car can seat no more than 6 people. \_\_\_\_\_
- The car insurance will be less than \$300 per year \_\_\_\_\_
- The gas will cost more than \$3 per gallon. \_\_\_\_\_

Now it's your turn!

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

1968  
1969  
1970  
1971  
1972  
1973  
1974  
1975  
1976  
1977  
1978  
1979  
1980  
1981  
1982  
1983  
1984  
1985  
1986  
1987  
1988  
1989  
1990  
1991  
1992  
1993  
1994  
1995  
1996  
1997  
1998  
1999  
2000  
2001  
2002  
2003  
2004  
2005  
2006  
2007  
2008  
2009  
2010  
2011  
2012  
2013  
2014  
2015  
2016  
2017  
2018  
2019  
2020  
2021  
2022  
2023  
2024  
2025  
2026  
2027  
2028  
2029  
2030