SLO: I can identify the hypothesis & conclusion for a conditional statement and explain why conditional statements are useful in life and in math – especially geometry.

☺☺☺☺Today is a GREAT day to think mathematically! Let's get organized first. ☺☺☺☺

TABLE OF CONTENTS: **10/31   Conditional Statements**

NEW NOTEBOOK PAGE: **10/31 Conditional Statements – Name**
                          SLO: I can identify the hypothesis & conclusion for a conditional statement and
                          explain why conditional statements are useful in life and in
                          math – especially geometry.

Assignment Sheet: **10/31 CW: Conditional Statements Due 10/31**
                  10/31 HW: Conditional Statements Due 11/1

DO NOW SHEET: **Name, Date, Period,**
                     Copy and complete the statement: "If I am caught with my phone out, then _____ "

LESSON: (Record all work in your notebook.)

Notes (Copy into your notebook and draw a box around them)

Vocabulary:
   Conditional Statement: "If ⬭⬭⬭⬭⬭⬭ then _____ "
                              (hypothesis)   (conclusion)

   Conjecture: "If-then" statement written based on observation. Conjectures are unproven ideas.
   Theorem: "If-then" statement that has been proven
   Counter Example: A case when a conditional statement is not true

✗💬✎ (1) Copy each statement below. For each conditional statement, circle the hypothesis and underline the conclusion. Give a counterexample if the statement is not always true.

   (a) If a costume is really good, then more candy is given. _____
   (b) If it is Halloween, then it is October 31.   _____
   (c) If it gets suddenly colder, then a ghost is present.   _____
   (d) If lines are parallel, then corresponding angles are equal. _____
   (e) If a reason makes sense, then it must be true.   _____

💬✎ (2) Why are conditional statements important in a court of law? In a scientific experiment?

SLO: I can identify the hypothesis & conclusion for a conditional statement and explain why conditional statements are useful in life and in math – especially geometry.

3)

🏠 HOMEWORK

Copy onto a paper that can go home:

Write an equation for a line parallel to:
1 – Line a (-5, -5), (5, 5) through point: (-2, -5)
2 – Line b (-1,4), (-3, 0) through point: (0, 0)
3 – Line c (5, 0), (0, 5) through point: (-5, 4)

Write an equation for a line perpendicular to:
4 – Line d (-3, 3), (2, -2) through point: (-1, 1)
5 – Line: (1, 5), (-1, 5) through point: (0, 0)
6 – Line: (5, -3), (-5, 2) through point: (-1, 0)

EXIT | BACK OF DO NOW SHEET: Today my level of understanding is ☺ 😐 ☹ because _____

The lines below are parallel/perpendicular/neither. Justify your response.

$$y = 3x - 4 \quad \& \quad -6y = 2x + 24$$