What happens when air masses meet?

Name: _____ Date: _____ Period: _____

LT: I can model and describe three different types of fronts – cold, warm and stationary.

To view the weather front simulations, follow these directions precisely:

1. Open internet explorer.
2. From the RRMS main page open to Mrs. Renn's website.
3. Select the Helpful Resources and Answer Key Link.
4. Under Helpful Videos, choose the Fronts Simulation hyperlink. This should take you to the following link: http://www.phschool.com/atschool/phsciexp/active_art/weather_fronts/

Directions: For the animations of the **cold, warm and stationary fronts**, complete the following steps.

1. SKETCH: Watch the animation and draw the front in the correct box. Then label the following:
   - ☐ The temperature of each air mass (hot or cold).
   - ☐ The direction each air mass is moving with solid arrows (⟶).
   - ☐ The overall direction that the front is moving with a dashed arrow (⇢).
   - ☐ Show and label where the weather/precipitation happens.
2. READ all the information in the small box above the animation. Make sure you use the tool on the right side of the writing to scroll to all of the way to the end. You can increase the font if needed.
3. WRITE: Describe what happens at each type of front. Include answers to all the following:
   - ☐ What type of air masses collided?
   - ☐ Which one gets pushed upwards?
   - ☐ Why does that air mass get forced up?
   - ☐ What is the weather like at that kind of front?
   - ☐ How long does the weather usually last?

Cold Front:

Sketch a cold front.	Describe a cold front in writing.

1. What type of weather happens when a cold front pushes up an extremely warm and moist air mass?

   _____

   _____

2. What would the weather be like if the cold front pushed under warm air that was not very moist?

   _____

   _____

Warm Front:

Sketch a warm front.	Describe a warm front in writing.

Stationary Front:

Sketch a stationary front.	Describe a stationary front in writing.

3. Think about everything you have learned about these 3 types of fronts…
    a. What type of front lasts the longest?

    _____

    b. What type of front brings the heaviest rains but moves through the fastest?

    _____

    c. Which type of front do you think is the easiest to identify in real life? WHY?

    _____

    _____

    d. Which type of front would you rather be caught outside in? WHY?

    _____

    _____