# ATMOSPHERE STATION PART 1 DIRECTIONS:

1) Watch the video. (https://tinyurl.com/muyjca8) 2) Answer the questions. 3) Check you answers with the teacher key (at the front desk). \*Materials in next sheet protector.

## ATMOSPHERE STATION PART 2 DIRECTIONS:

 Complete the worksheet.
Check you answers with the teacher key (at the front desk).

\*Materials in next sheet protector.

## ATMOSPHERE STATION PART 3 DIRECTIONS:

 Complete the memory matching game.
Check you answers with the teacher key (at the Front desk).

\*Materials in next sheet protector.

### ATMOSPHERE STATION PART 4 DIRECTIONS:

- Complete the quiz on your own (no notes) with the PENS! It <u>must be done in pen for a</u> <u>grade.</u>
  Grade your quiz with the COLORED PENCILS using the
  - teacher key (at the front desk).

3) Correct your missed answers in COLORED PENCIL! Make sure you explain! \*Materials in next sheet protector.

### **ATMOSPHERE STATION PT 1**

Answer the following questions from the video

1) What is the difference between absolute humidity and relative humidity?

2) Why does it tend to be cool at the Earth's poles?

- A. They have the worst weather
- B. They're farthest from the sun
- C. Sunlight strikes them at extreme angles
- D. They have high absolute humidity
- 3) What are the characteristics of a high pressure system?
  - A. Wind and rain
  - B. Clear skies and sun
  - C. Humidity and thunder
  - D. Extremely hot temperatures

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

#### **ATMOSPHERE STATION PT 1**

Answer the following questions from the video

1) What is the difference between absolute humidity and relative humidity?

2) Why does it tend to be cool at the Earth's poles?

- A. They have the worst weather
- B. They're farthest from the sun
- C. Sunlight strikes them at extreme angles
- D. They have high absolute humidity
- 3) What are the characteristics of a high pressure system?
  - A. Wind and rain
  - B. Clear skies and sun
  - C. Humidity and thunder
  - D. Extremely hot temperatures

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

#### **ATMOSPHERE STATION PT 2**

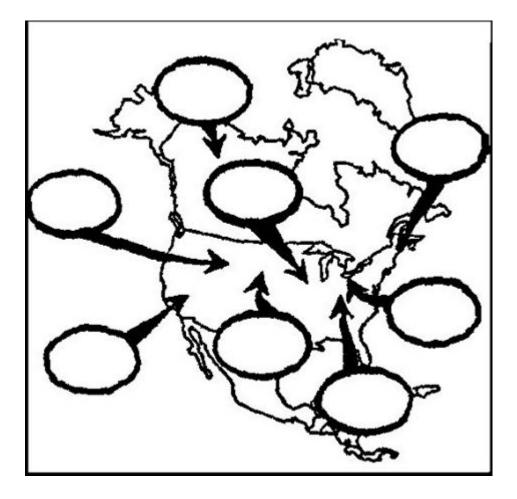
1) Where does weather occur?

2) Where is the ozone layer and why does it matter?

3) What is the atmosphere MOSTLY made up of?

4) Label the air mass picture using the following key based on where the air mass starts.

	Dry (starts on land)	Wet (starts on water)
Hot (starts in hot places)	Continental Tropical (cT)	Maritime Tropical (mT)
Cold (starts in cold places)	Continental Polar (cP)	Maritime Polar (mP)



5) If cold air moves quickly into warm air, what kind of front does it make AND what kind of weather?

6) A warm front brings what weather?

7) In a stationary front, neither air mass moves and it brings what kind of weather and for how long?

8) What have humans done that has depleted the ozone layer?

#### **ATMOSPHERE STATION PT 4**

#### MAKE SURE YOU USE PEN!!!

1) In which atmospheric layer of Earth do thunderstorms occur?

A thermosphereB mesosphereC stratosphereD troposphere

2) Which gas makes up the largest component of the Earth's atmosphere?

A argon (Ar)	B oxygen (O2)
C nitrogen (N2)	D carbon dioxide (CO2)

3) Which statement describes the general movement of air masses?

A They move from areas of high pressure to areas of low pressure.

B They move from areas of high altitude to areas of low altitude.

C They move from areas of low humidity to areas of high humidity.

D They move from areas of low temperature to areas of high temperature.

4) Which most likely occurs when a fast-moving cold air mass moves into a region of warmer, moist air?

A It causes light precipitation for a long period of time.

B It causes light precipitation for a short period of time.

C It causes heavy precipitation for a long period of time.

D It causes heavy precipitation for a short period of time.

5) Which contributes to the formation of hurricanes during the late summer?

A the interaction between ocean water salinity and warm air masses

B the interaction between ocean water currents and polar air masses

C the interaction between ocean water temperatures and warm air masses

D the interaction between ocean water salinity and ocean water density

6) Which is a major source of air pollution created by humans?

A hydroelectric plants	B industrial factories
C reforestation	D nuclear power

7) Which can lead to the depletion of the ozone layer of Earth?

A coal-fired power plants	B vehicle exhaust
C burning compost	D aerosols

8) How is climate different from weather?

A Climate is constantly changing, whereas weather changes slowly over time.

B Climate influences people's daily activities, whereas weather influences people's seasonal activities.

C Climate refers to the atmospheric conditions on a given date, whereas weather refers to the atmospheric conditions during a given season.

D Climate is based on observations made for a region over several years, whereas weather is based on day-to-day observations made for a region.

9) A local government voted against the large-scale development of buildings and roads in the area. What could have been the motive behind their decision?

A It could lead to a decrease in the average annual temperature in the area.

B It could lead to the formation of heat islands, which may impact the microclimate in the area.

C It could lead to the introduction of invasive species, which may impact the area.

D It could lead to a decrease in acid rain production in the area.