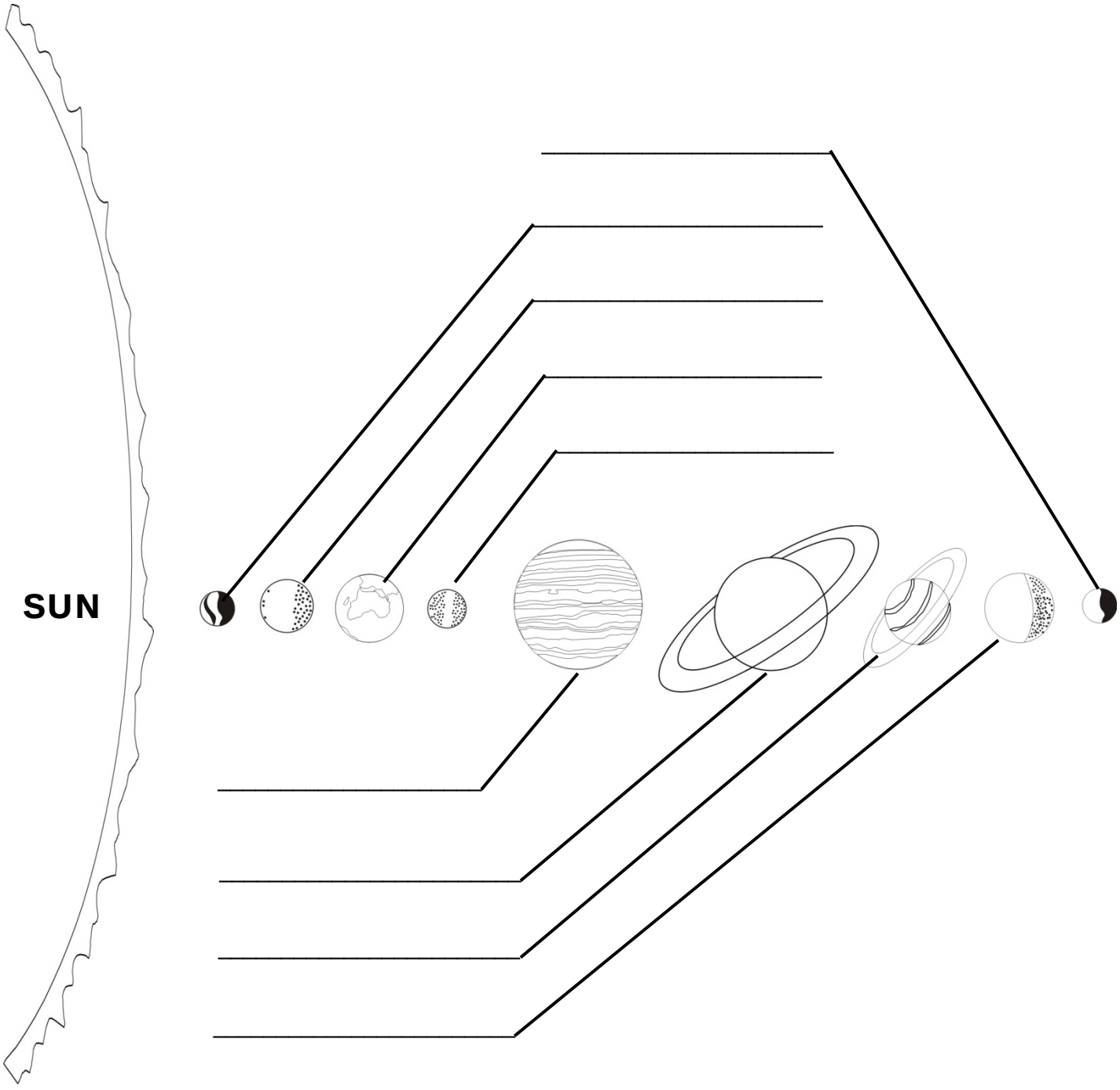
Name _____ Date ____ / ____ / ____

ALL THE PLANETS OF THE SOLAR SYSTEM

Provide the names for the planets shown in the diagram below using the names listed in the following table:

Earth	Mercury	Saturn
Jupiter	Neptune	Uranus
Mars	Pluto	Venus



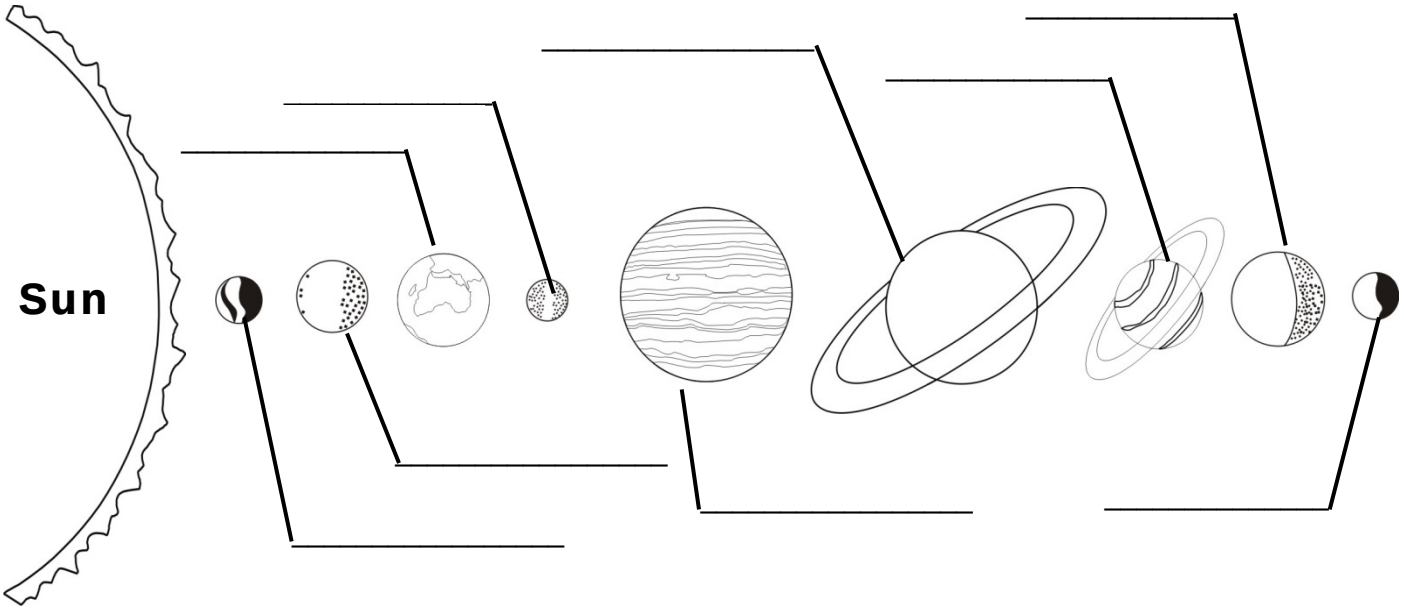
Name _____ Date ____ / ____ / ____

EXPLORING OUR SOLAR SYSTEM

Although many objects such as asteroids, comets, and meteors orbit our solar system's sun, the largest objects travelling around the sun are the planets. Use a source like an encyclopedia, your science book, or the internet to complete the chart about the nine traditional planets of our solar system below.

Planet Name	Position from the sun	Revolution time (Length of year Earth Days)	Rotation time	Known satellites	Distance From the Sun (in miles)
	1st				
	2nd				
	3rd				
	4th				
	5th				
	6th				
	7th				
	8th				
	9th				

Provide the names of the planets on the diagram below.

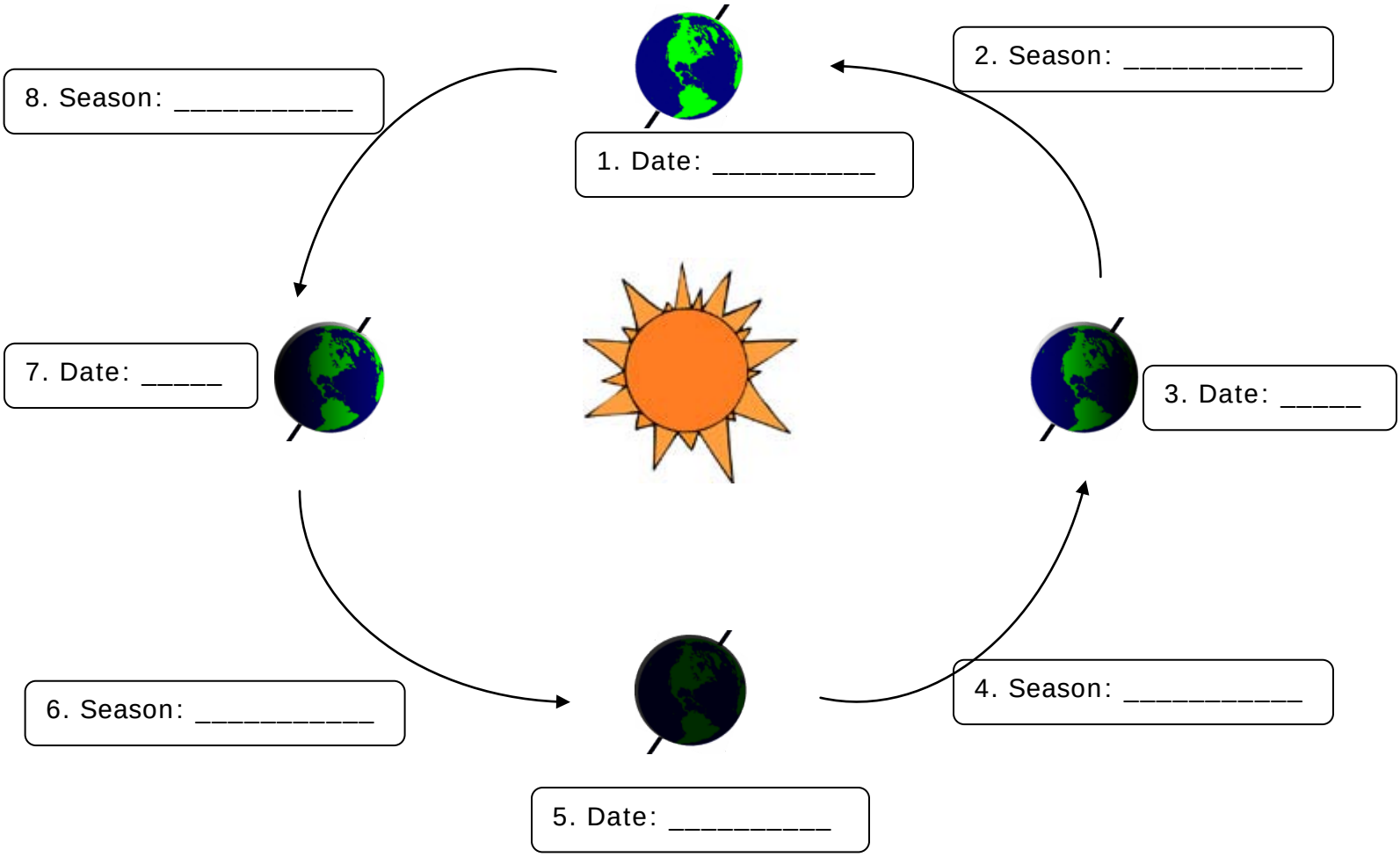


Name _____ Date _____

Seasons of the Year

The diagram below shows the Earth's position during different seasons throughout the year. Label the season and approximate date of each below.

Possible Dates		**Possible Seasons**	
December 22nd	June 21st	spring	fall
September 22nd	March 21st	winter	summer



Name _____ Date _____

The Planet News

Name of the planet: _____

# of planet from Sun: _____

# of moons: _____

Draw a picture of your planet.

Where does the name of your planet come from?

_____

Planets that are neighbors: _____ _____

Distance from the Sun: _____ Mass/Size of planet: _____

Time needed to orbit the Sun (**length of planet year**): _____

Time needed to rotate on its axis (**length of planet day**): _____

Average temperatures: High temperature: _____ Low temperature: ____

2 Interesting facts about your planet:

1. _____

2. _____

Name _____ Date ____ / ____ / ____

ACCELERATION AND GRAVITY, PART 1

The Earth's force of gravity creates an acceleration of 9.8 m/sec/sec on a freely falling body.

Using the equation , $a = \frac{V_f - V_i}{t}$, we can therefore calculate the velocity of a falling object at any time if the initial velocity is known.

Example: What is the velocity of a rubber ball dropped from a building roof after 5 seconds?

Answer: $9.8 \text{ m/sec/sec} = \frac{V_f - 0}{5 \text{ sec}}$

$V_f = 49 \text{ m/sec}$

Provide the answers to the questions below.

1. What velocity would a ball dropped from a tower have after after 10 seconds?

Answer:

2. If a piece of wood dropped from a tall building has reached a velocity of 68.6 m/s, for how long has it been falling?

Answer:

3. If a freely falling object currently has a velocity of 19.6 m/s, what is its velocity four seconds later?

Answer:

4. If a piece of stone has attained a velocity of 88.2 m/sec after falling for 8 seconds, what was its initial velocity?

Answer:

5. If an object is dropped, how long will it take to attain a velocity of 127.4 m/sec?

Answer:

Do Smartphones Cause Brain Drain?

At the McCombs School of Business at The University of Texas, 800 subjects participated in several experiments designed to gauge whether just the presence of a smartphone can reduce our ability to concentrate.

Participants were instructed to silence their phones. They were then divided randomly into three groups: the first kept their smartphones face down on the desk in front of them; the second left them in a purse or bag; and the third group left their smartphones in another room. The test results showed that the farther the participants were from their phones, the better that they performed on the test, suggesting that just the presence of a smartphone has the ability to distract us. McCombs Assistant Professor Adrian Ward describes it this way: “Your conscious mind isn’t thinking about your smartphone, but...the process of requiring yourself to not think about something uses up some of your limited cognitive resources. It’s a brain drain.” The aspects of our brain being drained — the things the first experiment was designed to measure — are our capacities for learning, logical reasoning, abstract thought, problem solving, and creativity.

The second experiment attempted to find a correlation between cognitive capability and the extent to which each subject felt dependent upon their phone during the course of a normal day. Participants who identified themselves as feeling the most dependent on their phones, and whose phones were within reach, performed the worst on the test.

The study concludes that being close to our phones means that we are less likely to rely on analysis and deliberation when making decisions and more likely to choose courses of action which are simple and emotionally or sensorially rewarding. They go on to suggest that voluntary separation from our smartphones can restore our ability to concentrate, and reduce our dependence on them.

Name _____ Smartphones

QUESTIONS: Do Smartphones Cause Brain Drain?

1. What was the McCombs School of Business study designed to gauge?

2. What were all participants instructed to do prior to beginning the test?

3. Participants were divided randomly into three groups. What instructions were given to each group?

4. What did the test results show?

5. What does Adrian Ward mean by "brain drain?"

6. What aspects of our brain does Ward believe are being drained?

7. What was the second experiment attempting to find?

8. What was the conclusion of the McCombs experiment?