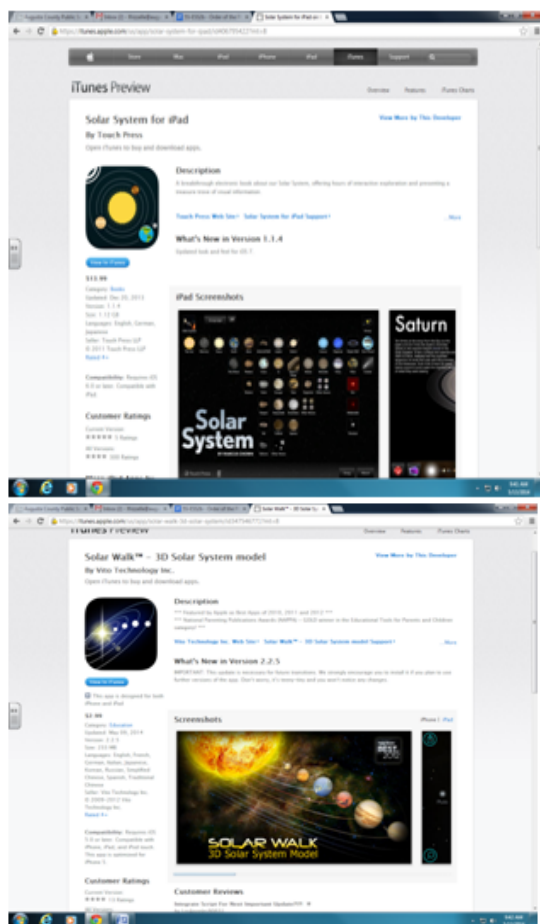


Ordering the Planets in the Solar System

Overview: The student will demonstrate the ability to investigate and understand that the solar system consists of planets that are in order by their relationship to the sun and each other.

Procedure:

1. Teacher will provide instruction regarding the solar system. Using the My Solar System Book (supplied for this unit) the teacher will teach about each part of the solar system according to the book.



2. For each planet and then sun, the student will investigate by going to the library, using the Internet, Solar System Resource page (supplied for this unit), or using the iPad apps. The student will be required to record new facts learned by one of the following choices:

- Write two new facts
 - At teacher discretion, the student could include the facts in Solar System Foldable (supplied for this unit)
- Type two new facts with or without the support of *Co:Writer* or *ReadandWrite*
- Take images of the new facts and embed them into a SMARTnotebook file
- Use video feature on an iPad, computer, or camera to record the student verbalizing new information s/he has found while investigating

More information on the apps provided:

- <http://www.touchpress.com/titles/solarsystem/>
- <https://www.youtube.com/watch?v=25jGFFErJJ0>
- <http://vitotechnology.com/solar-walk.html>

3. Once the student has completed the *My Solar System Book* and the investigation part of the ASOL, the teacher will begin to focus more on the order of the planets. As a starter activity to introduce this concept, the teacher will have the student work independently or

in a group to complete the *Put the Planets in Order on Strip* (supplied for this unit).

4. For more opportunities to practice ordering the planets, the student can interact with the *Order the Name of the Planets* SMARTboard activity (provided for this unit).
5. In order to show that the student is able to understand the order of the planets in the solar system, s/he can be provided the following assessments:
 - a. Label the Planets
 - b. Ordering the Planets
 - c. Solar System Foldable

ASOL Covered:

5S-ESS 2 The student will investigate and understand the organization of the solar system. Key concepts include

- a) the planets in the solar system.
- b) the order of the planets in the solar system.

HSS-ESS 1 The student will investigate and understand the characteristics of Earth and the solar system. Key concepts include

- a) position of Earth in the solar system.

Materials Needed: *Label the Planets, My Solar System Book, Ordering the Planets, Put the Planets in Order on strip, Solar System Foldable, Order the Name of the Planets SMARTboard activity, Solar System Resources* document, glue, scissors, crayons, pencil/markers, sentence strip or long piece of paper, computer/iPad for Discovery Education Videos and Tar Heel Reader Books, iPad (if accessing apps or using the video component), camera (if wanting to video or take pictures during the investigation), *Co:Writer* (if using for writing)

Instructional Setting: The instructional setting could be in a resource setting, general education setting, or self-contained classroom. This science ASOL does not line up with the SOLs in the general education setting and may be difficult to embed instruction with same aged peers.

Community Connections and/or Peer Interaction: If the student chooses to go to the library to do some investigation, it allows the opportunity to make community connections and to have peer interaction. During the time the student is doing the sentence strip activity to introduce the ordering of the planet, the student has another opportunity to have peer interactions.

*If this ASOL is being used as an assessment for the VAAP portfolio, the student will need to complete the activity independently.

Functional Activity/Routine: Some skills that are incorporated into this activity/routine:

1. For the investigation piece the student can use technology to enhance the investigation part.
2. Student is learning to plan and gather materials for a desired activity.
3. Student is working on skills that promote independence.
4. Foldables are used in the general education classroom on a regular basis.

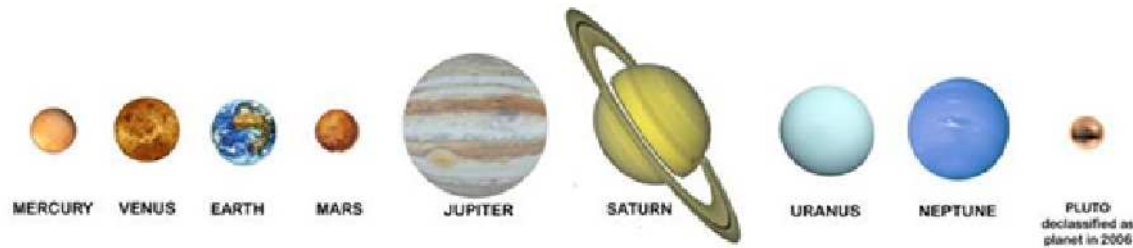
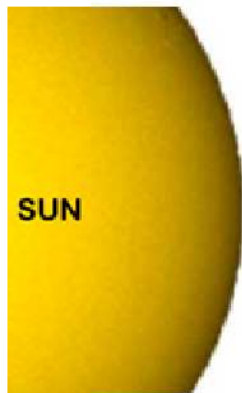
Strategies to Collect Evidence:

investigate and understand the. Key concepts include b) the order of the planets in the solar system

- Ways to demonstrate investigate
 - Write two new facts
 - At teacher discretion, the student could include the facts in *Solar System Foldable* (supplied for this unit)
 - Type two new facts with or without the support of *Co:Writer* or *ReadandWrite*
 - Take images of the new facts and embed them into a SMARTnotebook file
 - Use video feature on an iPad, computer, or camera to record the student verbalizing new information s/he has found while investigating
 - Use word predictor software to write facts
 - Provide descriptors using pictures and text and have student select facts to match each planet
 - Using a Venn Diagram have student sort pictures/text to compare and contrast two planets.

- Ways to demonstrate organization of the solar system by or ordering of the planets in the solar system
 - *Label the Planets*
 - *Ordering the Planets*
 - *Solar System Foldable*
 - *Use student specific means of communication to name the planets in order*
 - *Provide pictures of planets to order correctly*

My Solar System Book



by: _____



8

There are eight planets in the solar system.



1st
Mercury



Color gray.

2nd
Venus



Color yellow.

3rd
Earth



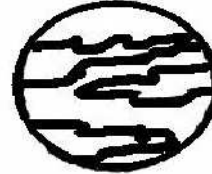
Color blue and green.

4th
Mars



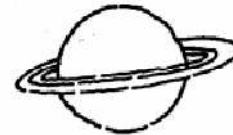
Color red.

5th
Jupiter



Color orange.

6th
Saturn



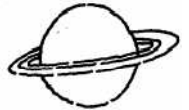
Color yellow.

7th
Uranus



Color blue-green.

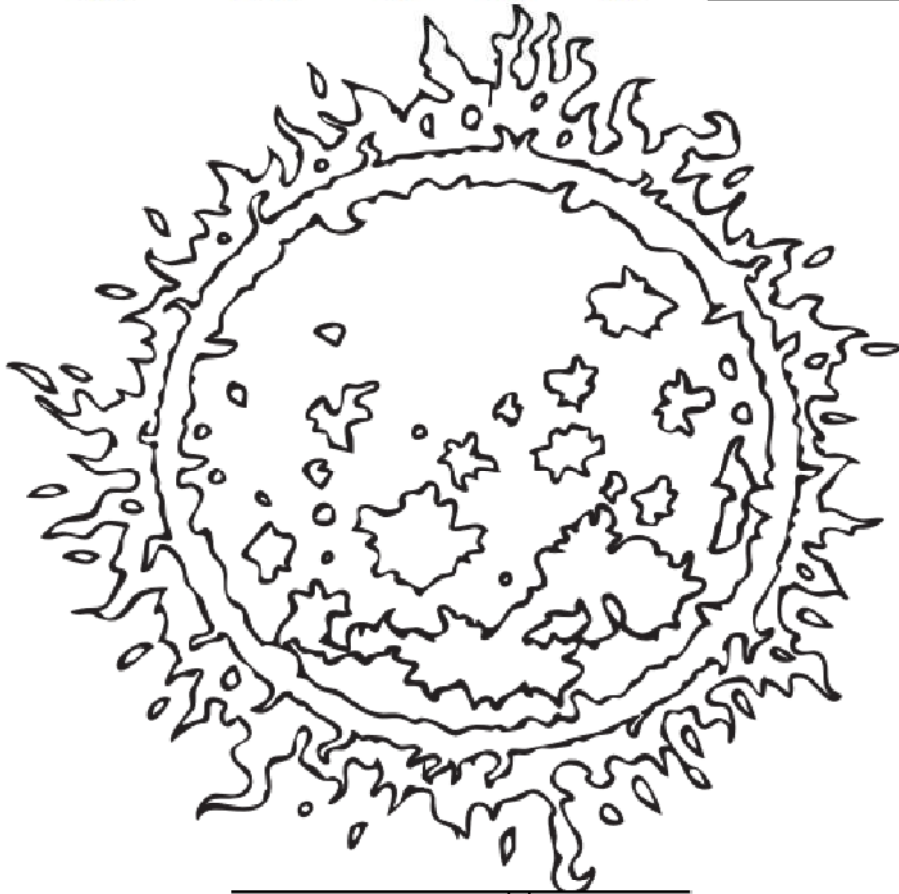
8th
Neptune



Color blue.



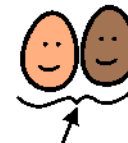
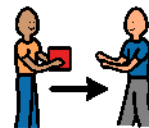
The sun is in the _____ of the solar system.



It is _____ than all



the planets.



It gives us

SUN



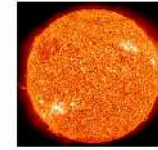


Mercury is the



planet

from the



sun.

Mercury



Color gray.



Fact about this planet:

Mercury



Venus

is

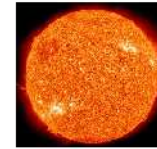
the



planet

from

the



sun.

Venus



Color yellow.

Fact

about

this



planet:

Venus



Earth

is

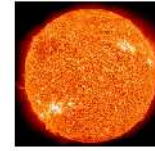
the



planet

from

the



sun.

Earth



Color blue and green.

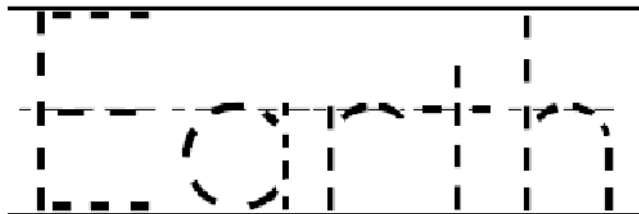


Fact

about

this

planet:

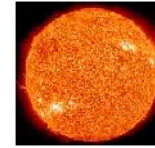





Mars is the



planet from the sun.



Mars



Color red.

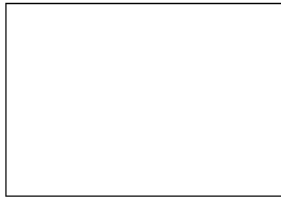


Fact about this planet:

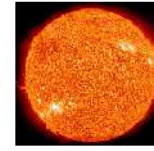
Mars



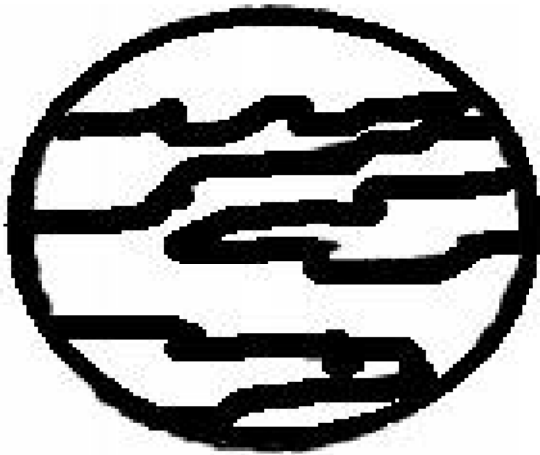
Jupiter is the



planet from the sun.



Jupiter



Color orange.



Fact about this planet:

Jupiter

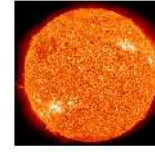


Saturn is the



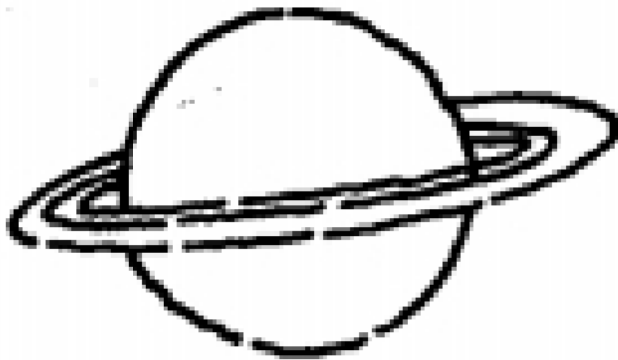
planet

from the



sun.

Saturn



Color yellow.



Fact about this planet:

Saturn

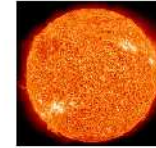


Uranus is the



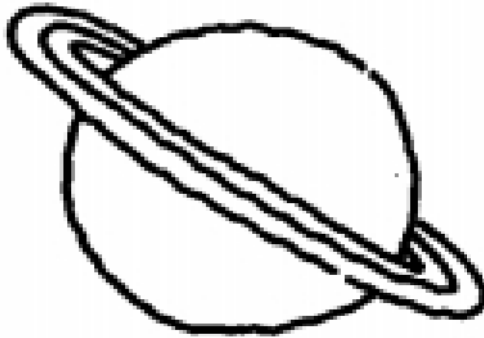
planet

from the



sun.

Uranus



Color blue-green.

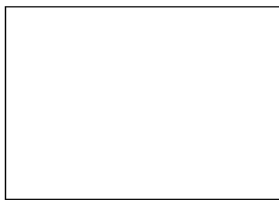


Fact about this planet:

Uranus



Neptune is the



planet from the sun.



Neptune



Color blue.



Fact about this planet:

Neptune



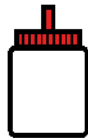
Other space objects:

paste here



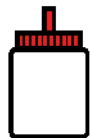
asteroids

paste here



comets

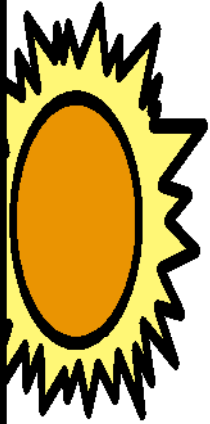
paste here



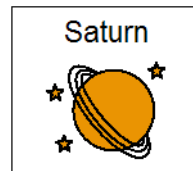
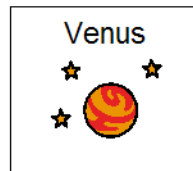
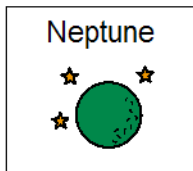
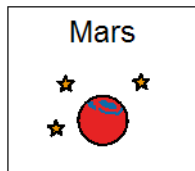
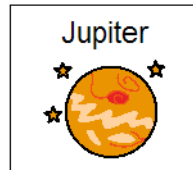
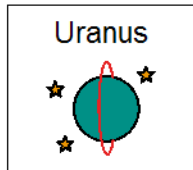
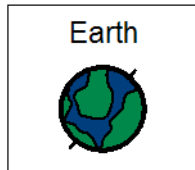
meteors










The order of the planets are:









1	2	3	4	5	6	7	8







 Cut  and  paste  into  the book.





 clouds  all around it


 planet  with people,
 plants,  and animals


 has  rings


 largest  planet


 is red  in color


 smallest  planet and
 closest to the  sun






center


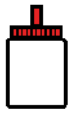
bigger


 tips to the side

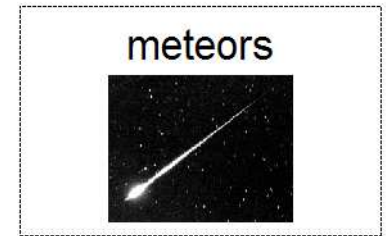
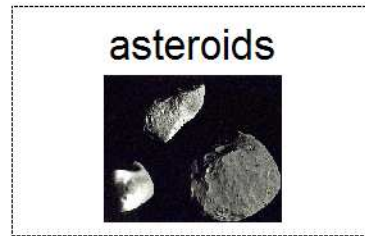
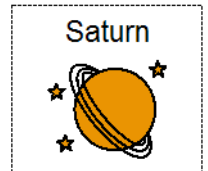
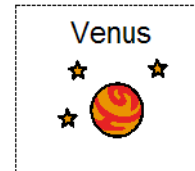
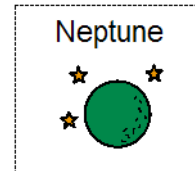
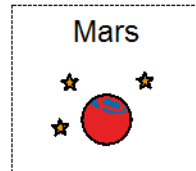
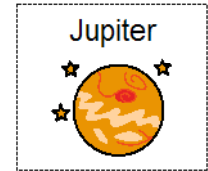
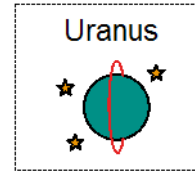
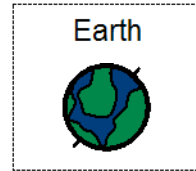
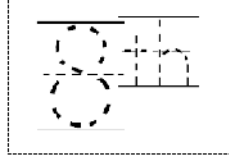
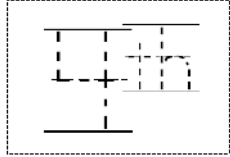
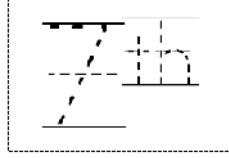
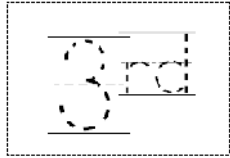
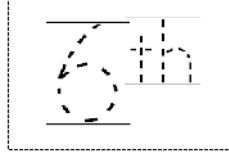
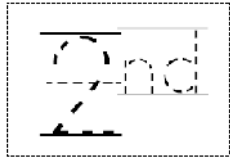
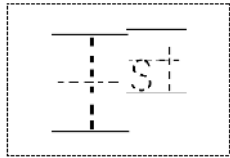
light


heat


 looks  blue and  has
 8  moons



Cut and paste into the book.

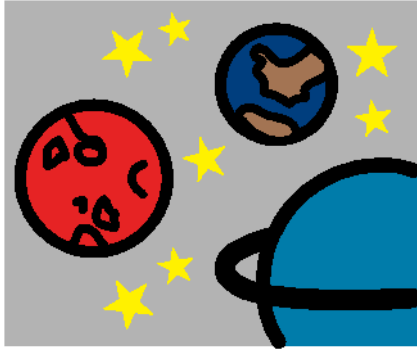


5



You will need 5 pieces of paper.

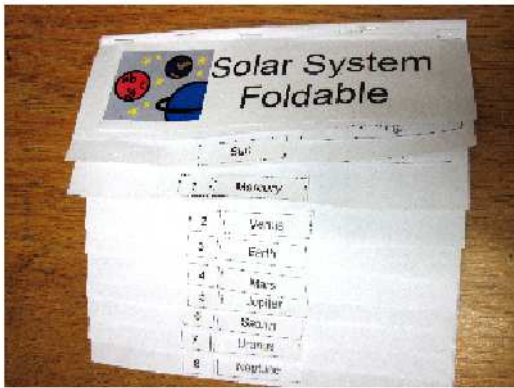
Cut this as your title page for the foldable.



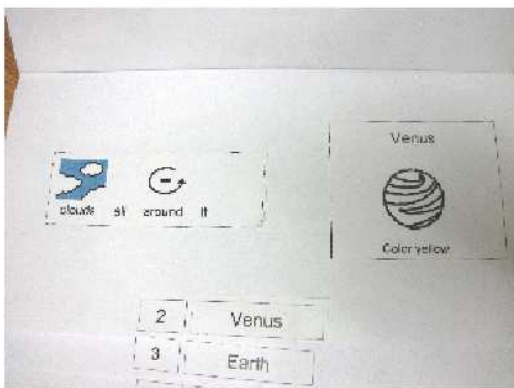
Solar System Foldable

Cut these as your titles for each flap.

Foldable will look like this:



An inside page will look like this:



Sun

1

Mercury

2

Venus

3

Earth

4

Mars

5

Jupiter

6

Saturn




7

Uranus


8

Neptune


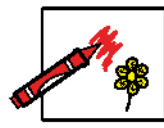
Cut these to go inside the foldable.



smallest planet and closest






to the sun


is red in color



clouds all around it

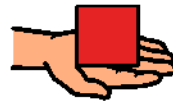

only planet with people, plants,




and animals

largest planet

has rings





tips to the side

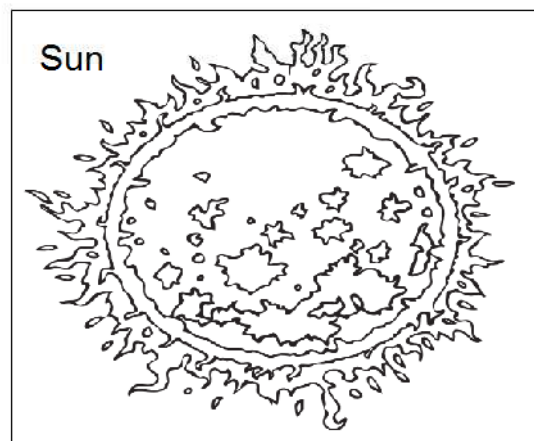
looks blue and has

8 moons

Center of the solar system



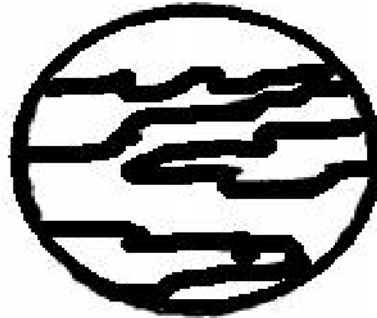
Color these and cut these to go inside the foldable.

Mercury



Color gray.

Jupiter



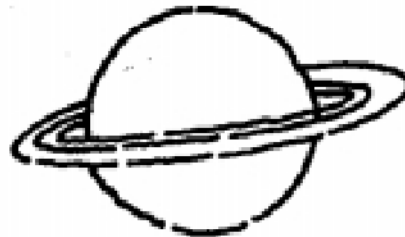
Color orange.

Venus



Color yellow.

Saturn



Color yellow.

Earth



Color blue and green.

Uranus



Color blue-green.

Mars



Color red.

Neptune



Color blue.



Goal - Cut and paste the planets in order from the sun



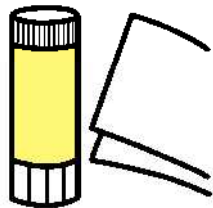
using a sentence strip.

You will need:

sentence strip



glue stick



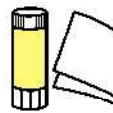
scissors



worksheet attached

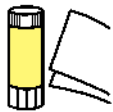
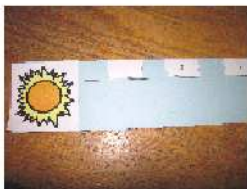


1



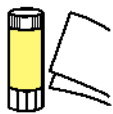
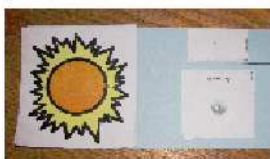
Glue the sun at the end of the strip.

2

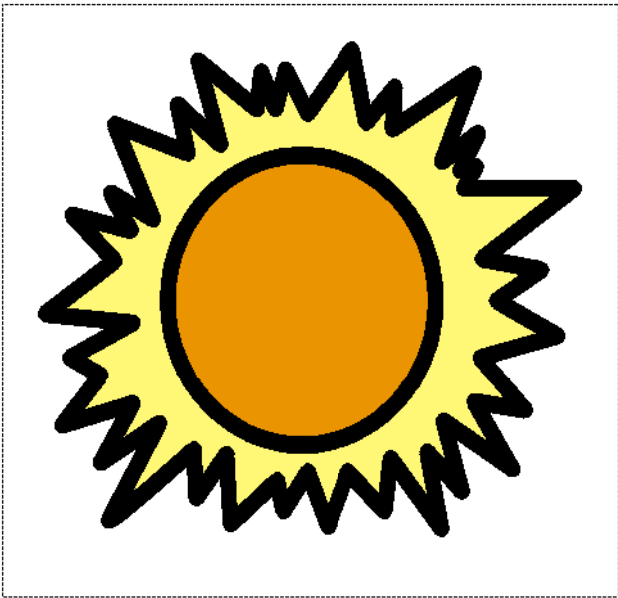


Glue the numbers in order on the strip.

3



Glue the planets in order on the strip.



1

5

2

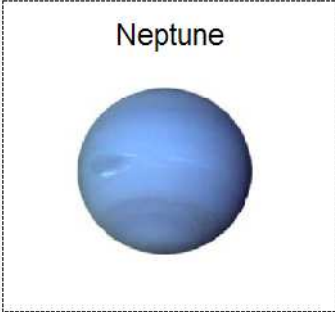
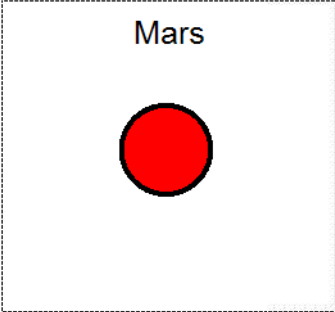
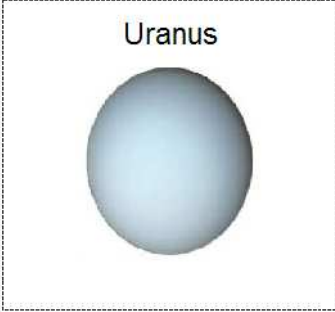
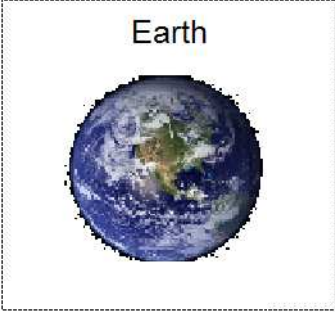
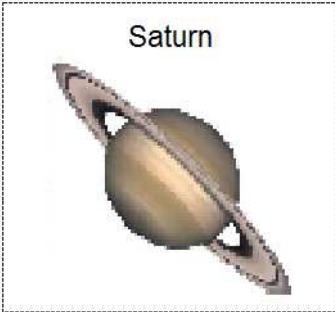
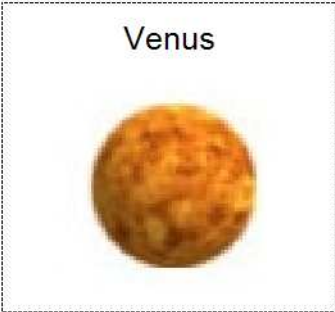
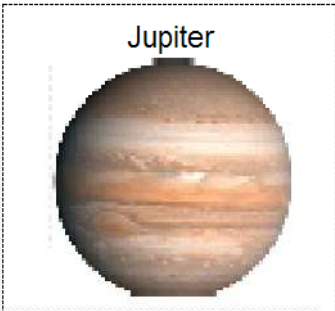
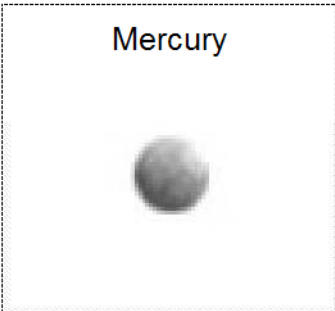
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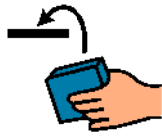
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7

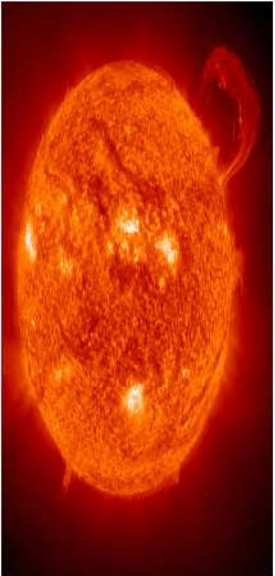
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8



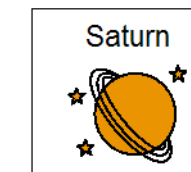
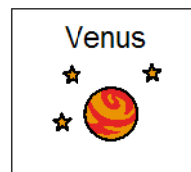
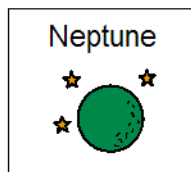
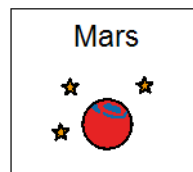
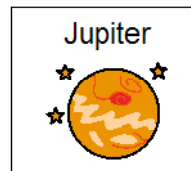
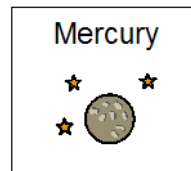
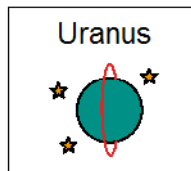
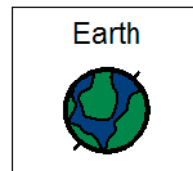


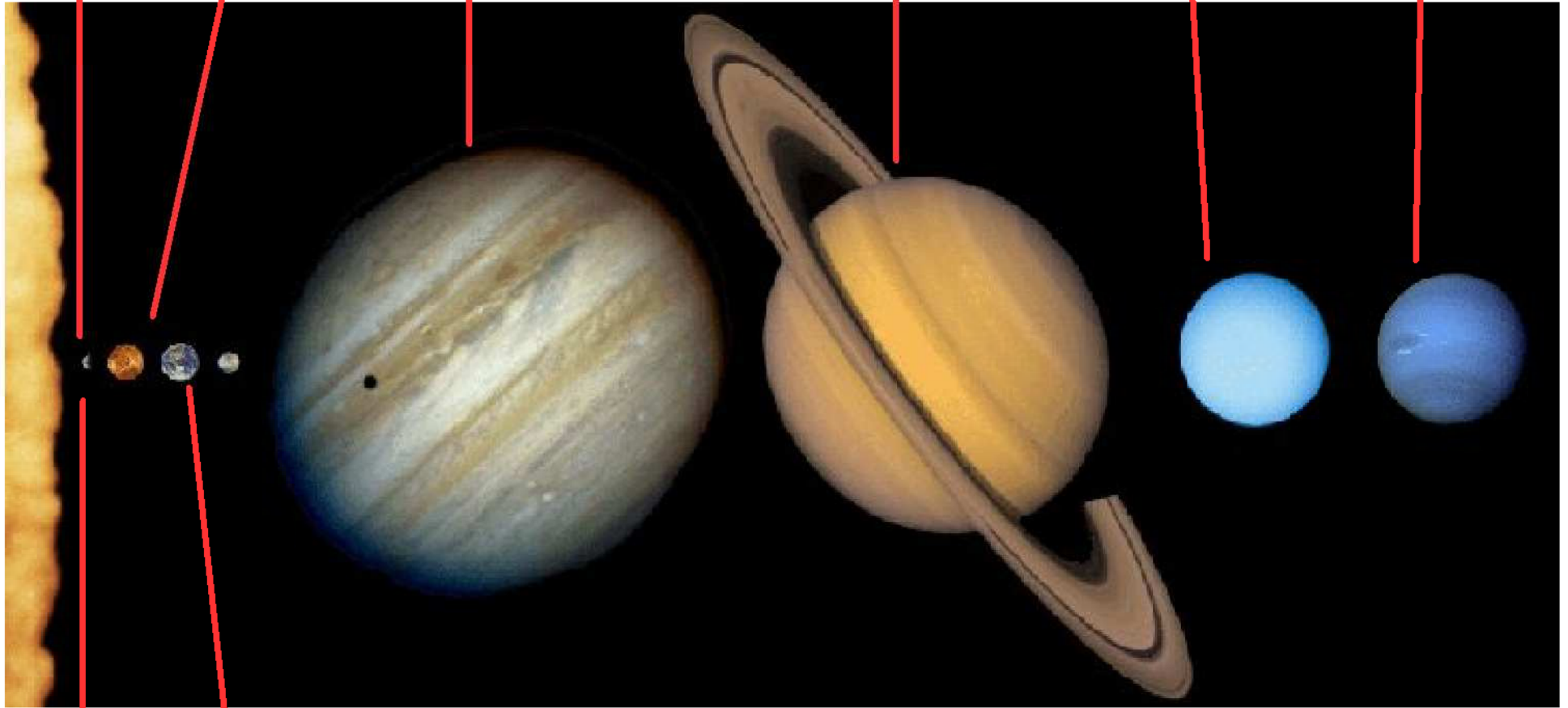
Put the planets in order from the sun.



1	2	3	4	5	6	7	8

Cut out the planets and paste them on the chart.



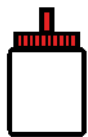


Label the Planets



Cut

and



paste

the



planets.

Venus

Earth

Saturn

Uranus

Mercury

Neptune

Mars

Jupiter

Solar System Resources

Image Cards for sizes of the Planets:

http://cse.ssl.berkeley.edu/AtHomeAstronomy/act09_imagecards.html

Information:

<http://cse.ssl.berkeley.edu/AtHomeAstronomy/index.html>

Tar Heel Reader Books:

<http://tarheelreader.org/2009/11/13/our-solar-system-3/>

<http://tarheelreader.org/2011/11/20/the-solar-system-7/>

<http://tarheelreader.org/2010/02/10/solar-system-fun/>

Brain Pop: Solar System, then a video for each planet. Must have access to Brain Pop (www.brainpop.com).