

Smarty Pants Space Watch Curriculum Corner

Table of Contents

Learning to Talk Like an Astronaut: Glossary of Space Terms

Language Arts - Using Reference Material

Science Vocabulary/Spelling Words

- Reading a Dictionary in Alphabet Order
- Science Sight Words
- Reading Comprehension

Science Facts Worksheets (*with pdf Solar System Coloring Page*)

Activities #1-6.

- Reading and Writing Information from a Visual
- Reading and Following Instructional Language
- Cognitive Practice 'Taking a Test'

Art: Activity #7

- 'Make-it' Shape Rocket with Teacher Directions (*with pdf Rocket Ship Coloring Page*)
- 'Draw-it' Free Art

Math: Activity #8 Worksheet (*with pdf Star*)

Counting/Writing Numbers

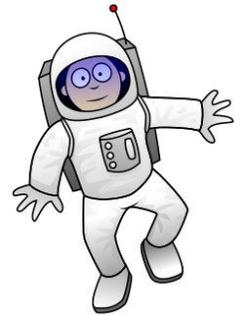
Shapes/Geometry/The Star/The Star Shape

Learning to Talk Like an Astronaut

Vocabulary

1. An Asteroid is a large chunk of rock or metal that orbits the sun.

"Most asteroids in our solar system are in a belt between the planets of Mars and Jupiter."



2. The Atmosphere is the air that surrounds the earth.

"The atmosphere of the earth is made up of nitrogen, oxygen, and carbon dioxide gases."

3. An Axis is an imaginary line through a space object.

"Earth spins on its axis one time in one day."

4. A Constellation is a group of stars that form a pattern.

"I can see the constellation that looks like the 'big dipper!'"

5. A Comet is a big ball of ice, dust, and rock pieces that orbits the sun. When a comet comes close to the sun, the heat melts the comet's ice to form a long, fuzzy tail of glowing gases.

"Halley's Comet, in our solar system, comes around every 76 years. Last sighting: 1986. Do the math!"

6. Galaxies are vast collections or areas of stars, gases, dust, and dark matter.

"Wow, there are billions of galaxies in the Universe!"

7. Gas is a form of matter that does not have a definite shape or a definite volume.

"Jupiter, Saturn, Uranus, and Neptune are gaseous planets."

8. Gravity is the force that pulls objects towards each other.

"The forces of earth's gravity keeps people from falling off the planet."

9. Mass is the amount of matter in an object.

"The Planet Jupiter has more mass than Earth".

10. Matter is anything that takes up space. Matter can be solid, liquid, or gas.

"Wood and gold are solid matter. Milk and soda are liquid matter. Oxygen and hydrogen are gas matter."

11. The Milky Way is the name of our galaxy.

"The Milky Way is a broad sweep of stars across the sky."

12. Meteoroids are small pieces of rock from a larger Asteroid far away in the sky.

"When two asteroids collide, pieces fly off as meteoroids."

13. Meteors are meteoroids that are falling down to earth, streaking light. Shooting stars.

"Meteors vaporize when they enter the atmosphere of the Earth."

14. Meteorites are meteoroids that slip through the atmosphere and land on earth.

"The Willamette Meteorite, found in Oregon, USA, in 1902, weighed 15 tons."

15. The Moon is a satellite held within the gravity and orbital path of the earth.

"Neil Armstrong was the first man to walk on the moon in 1969."

- **Moons** are also large rocky objects that orbit around planets.

"The Planet Uranus has 15 moons orbiting around it."

16. Motion is a change in position.

"The planets are constantly in motion, orbiting the sun."

17. Minerals are objects that are solid, formed naturally, and have never been alive.

"Rocks are made of minerals."

18. An Orbit is a path an object takes as it moves around another object in space.

"Earth orbits the sun once every year."

19. A Planet is a large body of rock or gas or ice that orbits the sun.

"There are now 8 recognized planets in our solar system."

20. The planets of our solar system are:

1. Mercury
2. Venus
3. Earth
4. Mars
5. Jupiter
6. Saturn
7. Uranus
8. Neptune

21. Rotation means the spinning of an object on its axis."

"The earth rotates on its axis once every 24 hours (one day)."

22. Rocks are hard minerals.

"The planets, Mercury, Venus, Earth, and Mars have rocky surfaces."

23. The Solar System is the sun and the objects that orbit around it.

"Our Solar System has a sun, eight planets, and other space objects."

24. A Telescope is an instrument used to see faraway objects.

"The Hubble Telescope can see all the way to Ultima Thule, the farthest thing visible in the Universe."

25. A Solid is a form of matter that takes up a specific amount of space and has a definite shape.

"Plants and animals are a form of solid matter."

26. Speed is a measure of how fast something moves over a certain distance.

"Light travels at a speed of 186,282 miles per hour."

27. Volume is the amount of space that matter takes up.

"It would take more than 1,000,000,000 Earths to fill up the volume of the Sun."

28. The Sun is the center of the solar system. It is a star - a hot ball of glowing gases.

"Long ago, people believed that the sun orbited around the earth."

29. A Star is a hot ball of glowing gases. A star is a sun.

"Stars twinkle in the night sky because they are suns - hot and glowing lights."

30. The Universe is everything that exists: galaxies, solar systems, planets, stars, and all forms of matter and energy.

"You are a part of the universe."

Name _____ Date _____

Science: Our Solar System Worksheet

1. Color the sun yellow.
2. Color the 3 planets that have rings around them.
3. Draw a circle around the 2 smallest planets.
4. Write the 8 planet names below.

M _____

V _____

E _____

M _____

J _____

S _____

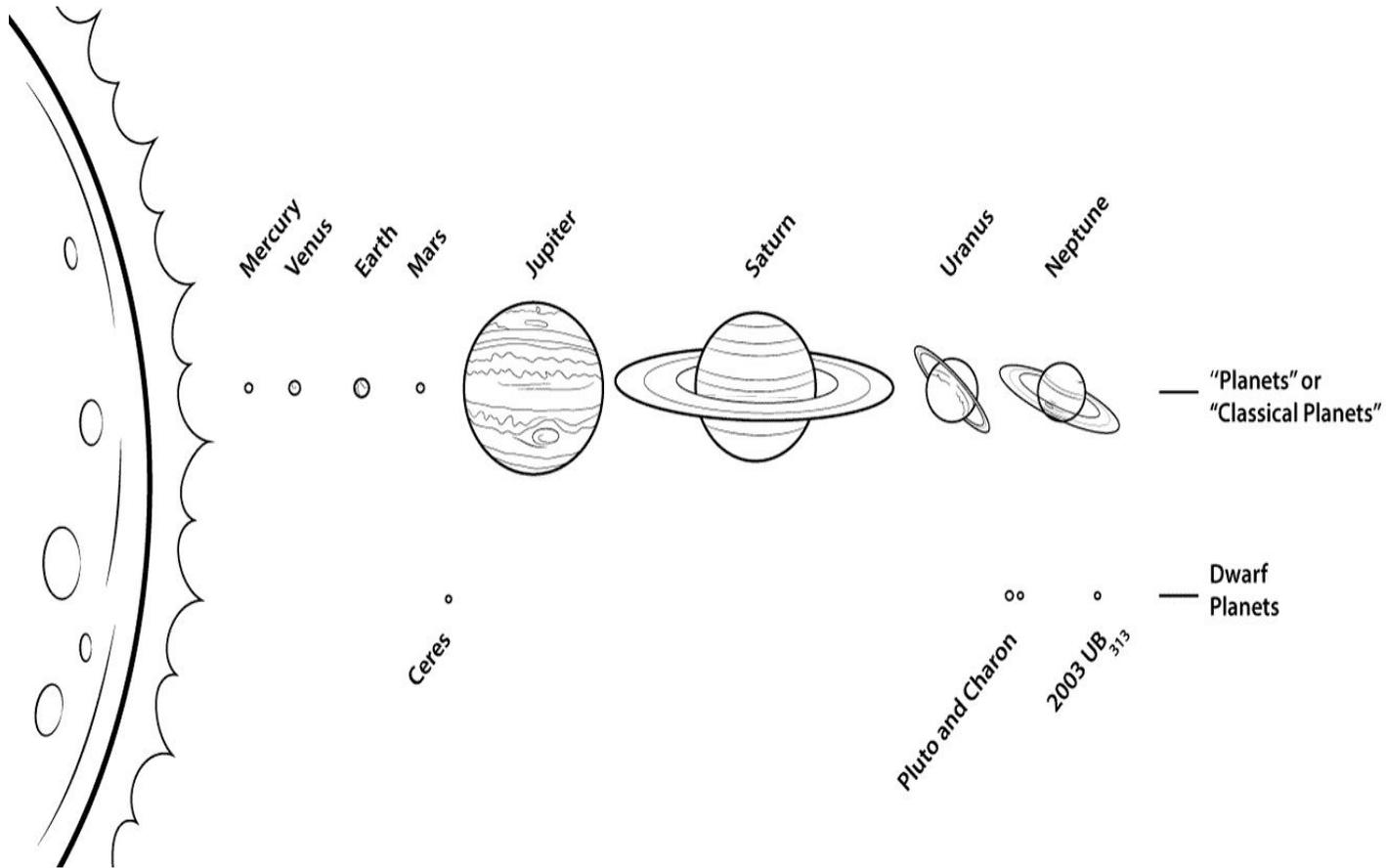
U _____

N _____

Name _____ Date _____

5. Draw a line to match these planet names to the planet in the picture below.

Jupiter Mercury Venus Earth Mars
Saturn Uranus Neptune



Name _____ Date _____

Using the Solar System picture, answer these questions.

The biggest planet is J_____.

The 3 planets with rings are S_____ ,

U_____ N_____.

The 2 planets that start with the same letter are

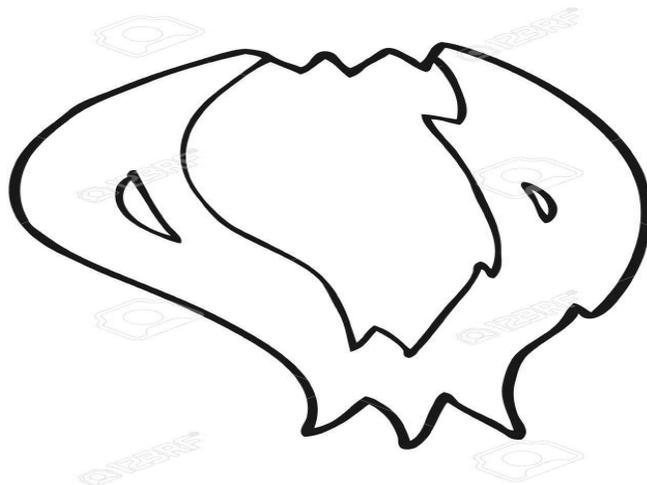
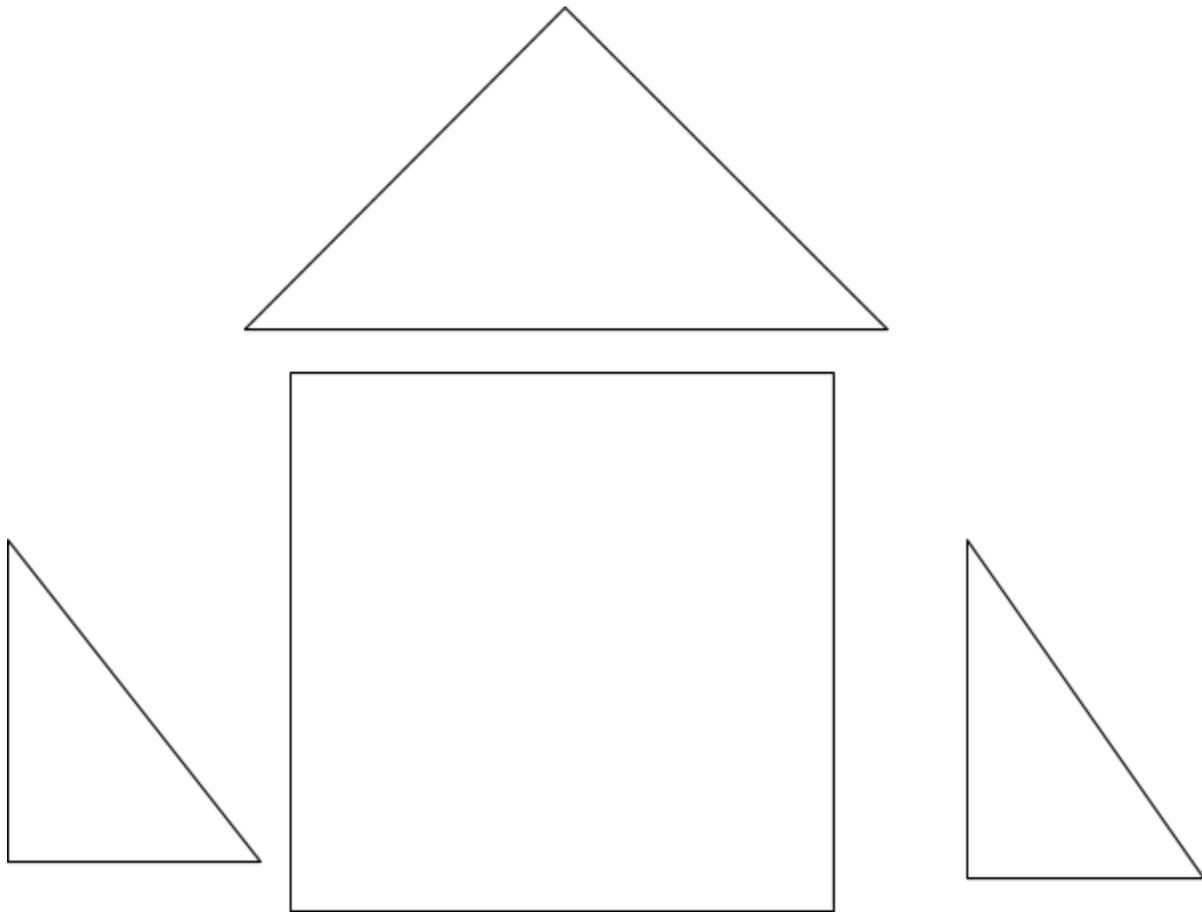
M_____ and

M_____.

Note: The Dwarf Planets are Ceres, Pluto and its moon - Charon, and 2003 UB. They orbit the sun and have very weak gravity.

6. ROCKET SHIP CRAFT MADE WITH SHAPES

Color, cut, and glue these shapes together to make your own rocket ship.



Educator Resources:

Activity #7 Completing a Project 'Make-it' Shapes Rocket Craft (pdf rocket shapes)

Materials

- Rocket shapes worksheets for class
- White sheet for gluing rocket
- Crayons
- Scissors
- Glue
- Glitter

Directions

- Use as a whole group or small group, self-directed or Teacher-directed activity, depending on age and skill level.
- Hand out the rocket shapes sheet, extra white sheet, and craft materials
- Instruct children to:
 1. Write their name on the blank Color Sheet.
 2. Color the entire sheet Blue or Black. This will be the sheet they glue their rocket pieces on.

Note: You can use the Smarty Pants Scribble Scrabble Art pdf

Put this sheet aside or take these sheets if cutting leaves lots of messy scraps

- Color the shapes
- Cut out the shapes
- Glue shapes on the Black or Blue colored sheet
- Put quick glue 'dots' on the page.
- Sprinkle glitter for stars.
- Proudly display in class

Name _____ Date _____

7. Draw your own Rocket. Use Red, Orange, and Yellow for Fire.

Name _____ Date _____

The Sun is a star.

(Copy the sentence here)

Sentence Math

Write the number that goes in the blank in each sentence.

1. This sentence has _____ words.

2. The Letter Ss is used _____ number of times in this sentence.

3. The Letter Aa is used _____ number of times in this sentence.

4. *A Homonym is a word that sounds like another word but is spelled in a different way.*

Write the word in the sentence above that is a Homonym.

Write the other word that sounds like Sun, but is the name of a boy born to his parents.

_____.

Star Math (see Star Shape pdf)

5. How many points are in this star? _____.

6. Draw a straight line across the bottom of each point to make triangles.

How many lines did you draw? _____.

7. How many triangles? _____.

8. Draw some small stars here:

