

Science

VOCABULARY Expanders

3RD
Grade



Did you know
that 763 Earths
could fit
inside Saturn?

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*Certificate of Completion
Answer Sheets*

** Has an Answer Sheet*

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Nature Trivia

Answer the questions and place the answer in the space provided. Write the letter with the corresponding number below to reveal the hidden nature fact.

1.) Does the sun set in the east or the west?

10 9 11 12

2.) A plant takes in carbon dioxide from the air.
What does it release?

5 13 14 15 9 6

3.) In which state is the Grand Canyon located?

1 2 3 4 5 6 1

4.) Is the male or female cardinal bright red?

7 1 8 9

5.) What is a squirrel's home called?

6 9 11 12

6.) What is the largest ocean in the world?

16 1 18 3 23 3 18

7.) What bird looks like it is wearing a tuxedo?

16 9 6 15 17 3 6

8.) What plant, when it has four leaves,
is considered lucky?

18 8 5 19 9 2

9.) What is the smallest bird in the
world?

20 17 7 7 3 6 15 21 3 2 22

10.) What kind of tree makes syrup?

7 1 16 8 9

--	--	--

12 20 9

--	--	--	--	--

15 2 1 6 22

--	--	--	--	--	--

18 1 6 14 5 6

--	--	--

10 1 11

--	--	--	--	--	--

18 1 2 19 9 22

--	--

21 14

--	--	--

12 20 9

--	--	--	--	--	--

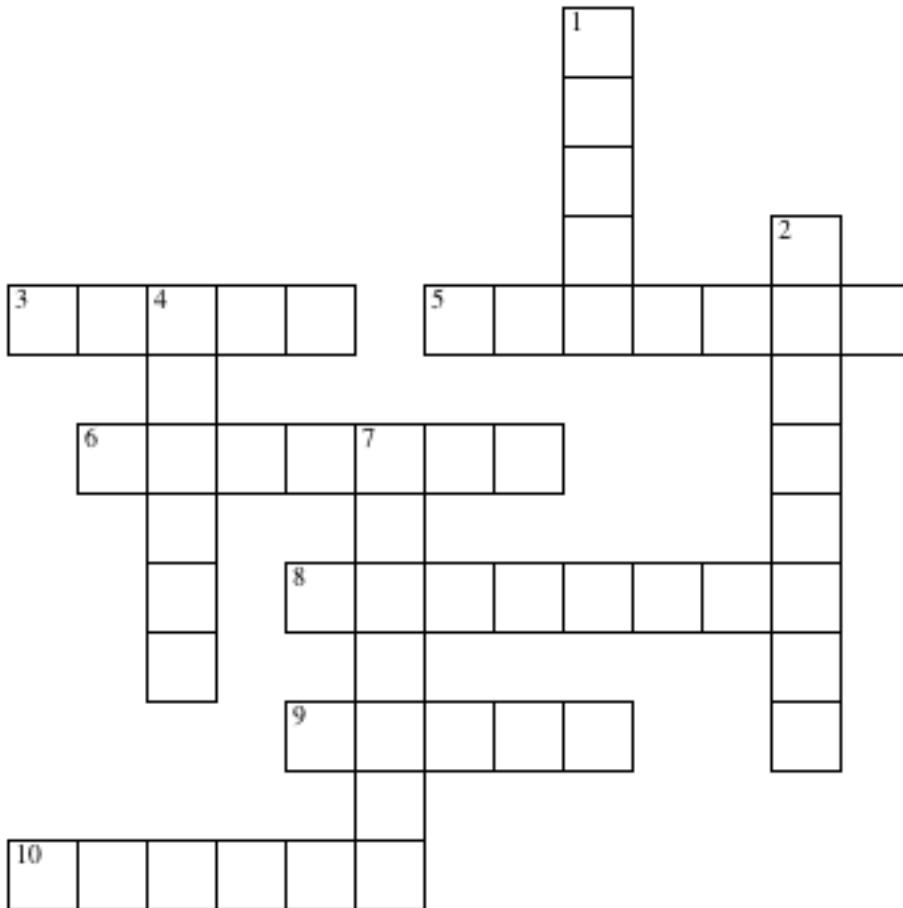
18 5 8 5 21 22 5

--	--	--

2 3 19 9 2

Landforms

Complete the crossword puzzle using what you know about the subject. Refer to the word bank if you need help.



Word Bank

levee
delta
river
valley
glacier
mountain
plateau
wetlands
canyon
erosion

Across

3. Embankment usually on the side of a river used to prevent overflowing
5. Large body of year-round ice & snow that moves slowly across the land and deposits sediment where it melts
6. Large area of flat land that is higher than the surrounding land
8. Landform in which the Earth's surface rises higher than 1,000 ft
9. Large natural stream that flows into a larger body of water
10. Steep-walled valley created by a river or stream

Down

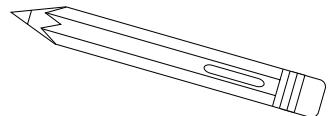
1. Deposit of sediment where a stream enters a larger body of water
2. Water ecosystems like saltwater marshes and swamps
4. Long, low area of land between hills or ranges of mountains
7. Process of wearing away or moving soil and rock by water, wind, and ice

Minerals

Match Up

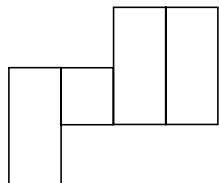
You can find this
in jewelry.

imadond



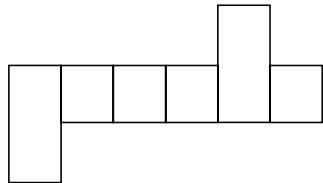
You can find this
in wedding rings.

olgd



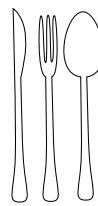
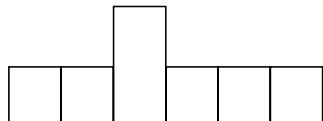
You can find this
in a watch.

tzqrua



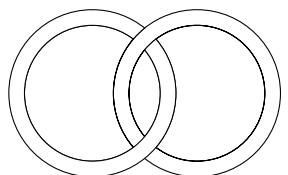
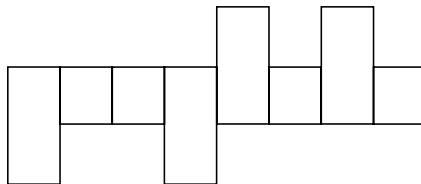
You can find this
in some forks,
knives, and
spoons.

vseilr



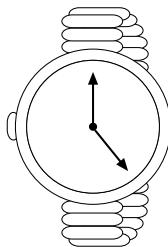
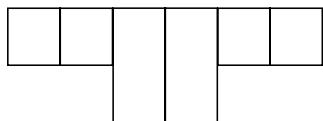
You can find this
at the end of a
pencil.

pihtegar



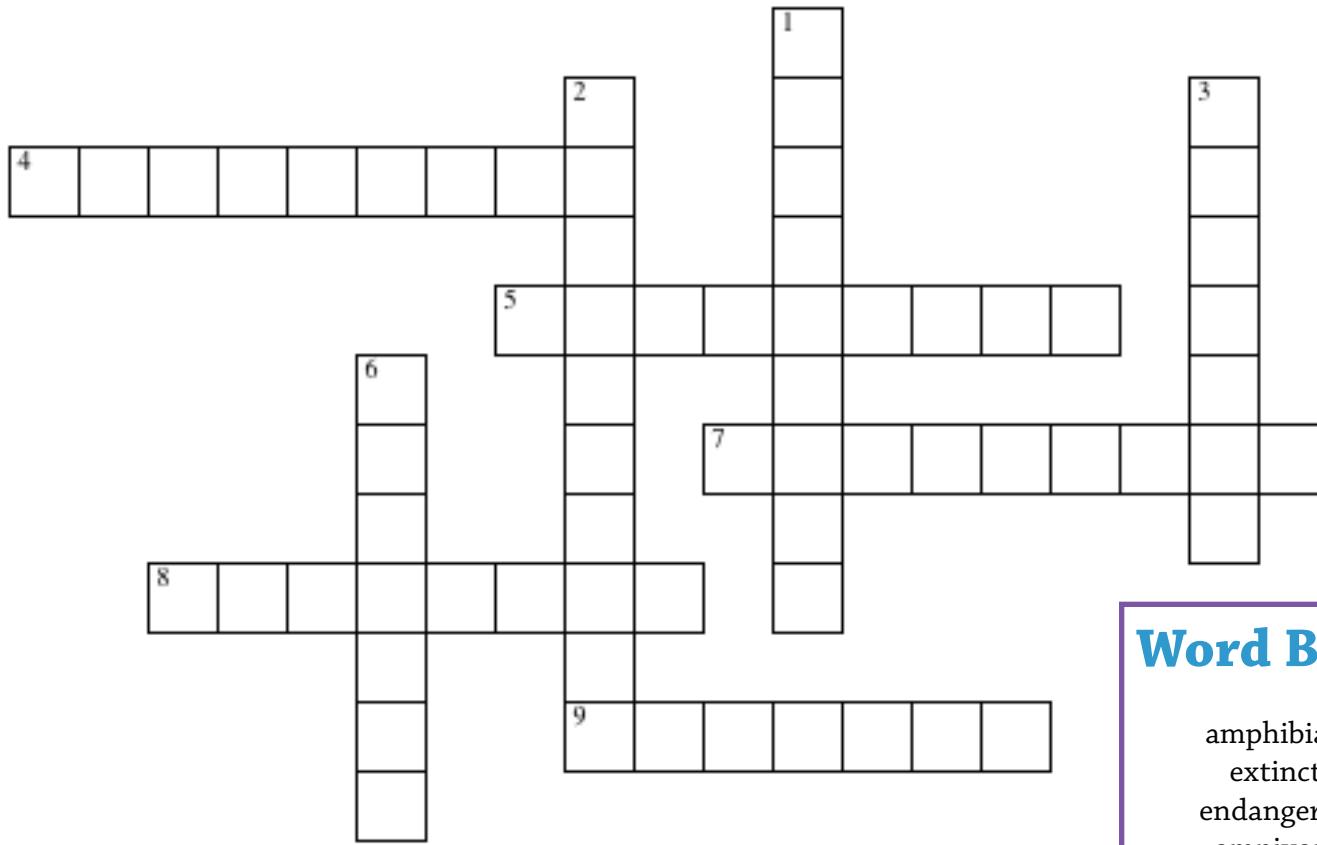
You can find this
in a penny.

poerpc



Animal Life

Complete the crossword puzzle using what you know about the subject. Refer to the word bank if you need help.



Across

- 4. Animal that begins life as a water breather and matures into an air breather
- 5. Animal that has a diet of only meat
- 7. Animal that is most active during the night hours
- 8. Animal that eats both meat and plant matter
- 9. Animal that is most active during the day

Down

- 1. Animal with a diet of only plant matter
- 2. Species' whose existence are threatened by loss of habitat or low populations
- 3. Species' natural environment
- 6. Species' that no longer exist

Word Bank

amphibian
extinct
endangered
omnivore
herbivore
carnivore
nocturnal
diurnal
habitat

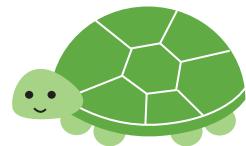
Animal Scramble!

Unscramble the names of the animals.

Use the highlighted letters to unscramble the name of another animal.

Reptiles

UTRELT



IATGOLALR



SANEK



COCROLIED

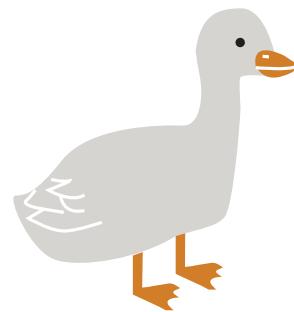


Birds

SAWN



OSEOEG



PRARTO



UCKD



ICENKHC

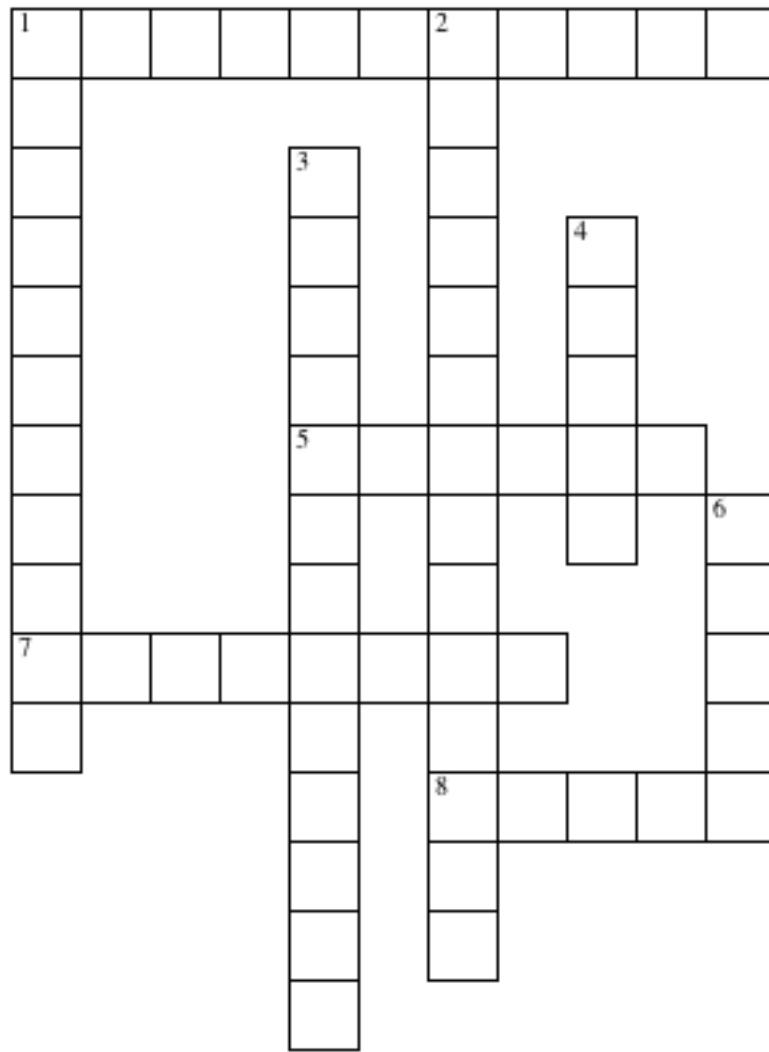


Photosynthesis

Complete the crossword puzzle using what you know about the subject. Refer to the word bank if you need help.

Word Bank

oxygen
carbon dioxide
sugar
green
water
sunlight
chloroplast
chlorophyll
photosynthesis



Across

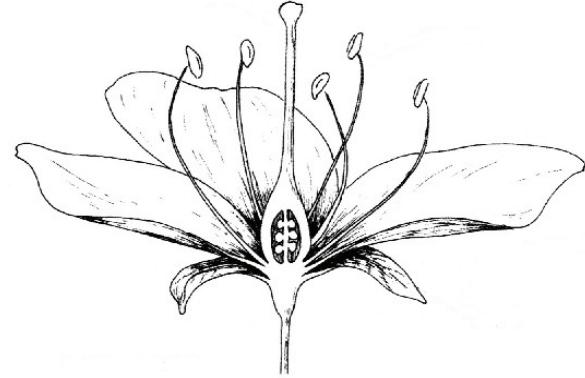
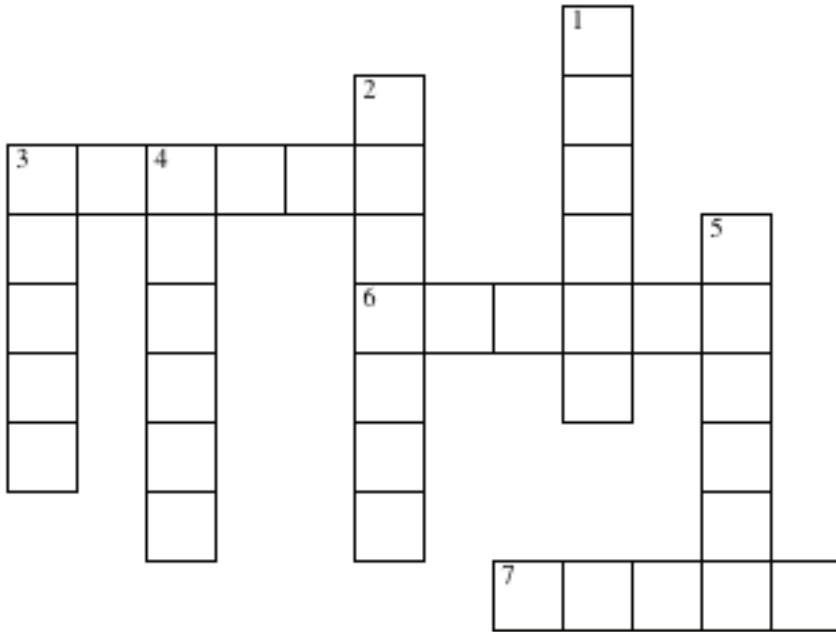
1. Part of a plant cell gathers light energy
5. Waste product of photosynthesis
7. Photosynthesis uses this form of energy to drive the process
8. Compound produced by photosynthesis

Down

1. Part of a plant cell that contains chlorophyll
2. Name of the entire process in which a plant produces its own food
3. One of the two compounds converted during photosynthesis; two words
4. Chlorophyll gives plant life this color
6. Other compound converted during photosynthesis; one word

Parts of a Flower

Complete the crossword puzzle using what you know about the subject. Refer to the word bank if you need help.



Word Bank

pistil
stamen
ovary
sepals
stigma
anther
blossom
petal

Across

- 3. Pollen travels through this tube
- 6. Provides support for the pollen maker
- 7. Contains the egg cells

Down

- 1. Traps pollen
- 2. Reproductive structure found on many plants called a flower or this
- 3. Attracts insects and birds
- 4. Protected the flower bud before it opened
- 5. Makes pollen

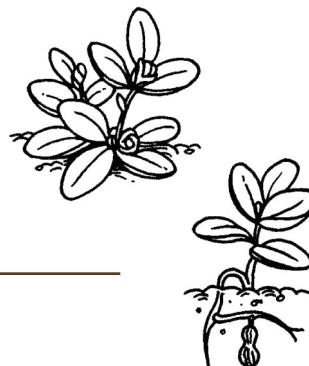
THE LIFE CYCLE OF A PEANUT PLANT



In spite of its name, the peanut is not a nut. It is a legume. Beans, peas, and lentils are other types of legumes. Learn about the life cycle of the peanut through the activities below.

Use a word from the word bank to complete each sentence. Then number the sentences in the order of the life cycle that the peanut goes through.

____ Little _____ grow on the lower parts of the plants.



____ The peanuts grow inside a _____ under the ground.



____ When the _____ die, a special stem grows down from each flower.



____ This stem is called a _____.



____ Farmers plant peanut _____ in long rows.



Use this box to draw a picture of a peanut plant. Show and label as many parts as you can.

EARTH!

Know Your Planets:

This is a picture of Earth, our home planet. Color in the cross-section drawing below using what you've learned.

Name:

Earth is named after the Ancient Greek goddess of mountains and streams.

Size:

Earth is the fifth largest planet in our solar system. Earth and Venus are nearly the same size, but Earth is slightly larger.

What's It Made Of?:

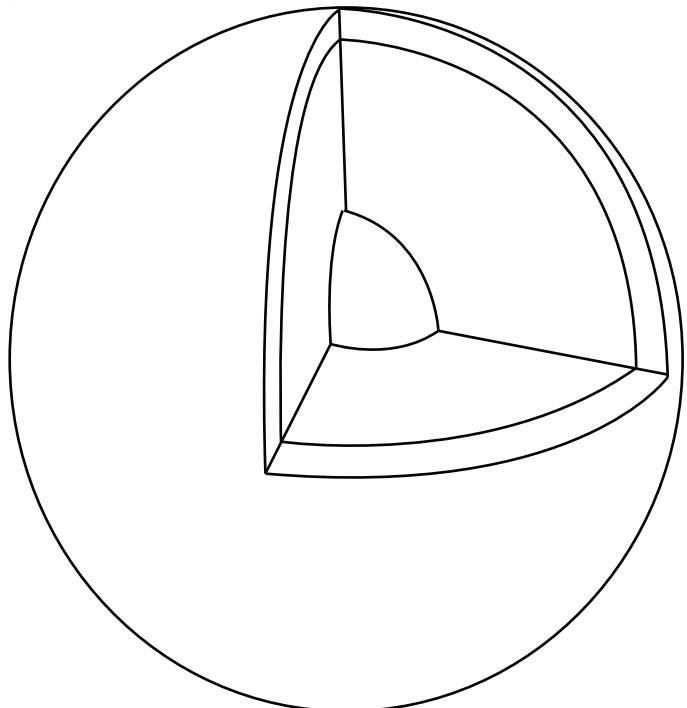
Earth is called a terrestrial planet, which means it is made mostly of rocks. The outer crust contains rocks and metals such as iron and magnesium. The mantle is made of metals and silicates. The core is made of liquid and solid iron and nickel.

Where Is It?:

Earth is the third planet from the sun. Earth and Mars are the only two planets that are the right distance away from the sun so that it is not too hot or too cold to support life.

Life:

High amounts of water and metals, as well as a thick atmosphere that keeps a stable temperature, have made Earth a place where life thrives.



Scrambles: Unscramble the words for the answer.

70% of the Earth's surface is covered with this:

LTSA RTEWA

Earth's internal heat comes from this section:

REOC

This protects the Earth from the sun's radiation:

ZOEON

SATURN!

Know Your Planets:

This is a picture of Saturn. Color in the cross-section drawing below using what you've learned.

Name:

Saturn is named after the Roman god Saturn.



Size:

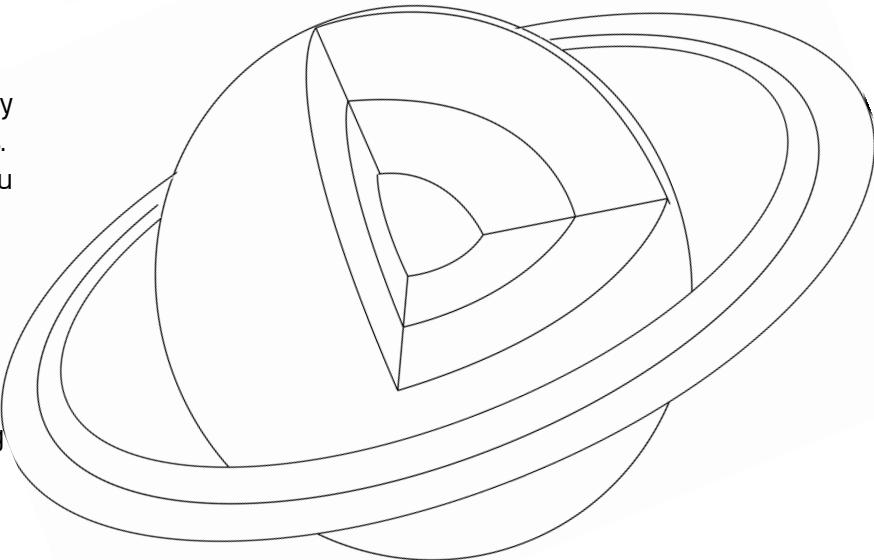
Saturn is the second largest planet in the solar system. 763 Earths could fit inside of Saturn!

What's It Made Of?:

Saturn is considered one of the gas giants along with Jupiter, Uranus and Neptune. It has a rocky core but is mostly made of hydrogen and helium gas.

Where Is It?:

Saturn is the sixth planet from the sun. It is not easy to spot at night. It is the fifth brightest visible planet. It is a yellow point in the sky but with a telescope you can see its rings. It is on average 888 million miles away from the sun!



Rings:

Saturn has nine rings. They are made mostly of ice with some dust. Saturn also has 62 moons orbiting it and most of them have names!

Scrambles:

Unscramble the words for the answer.

The fifth planet from the sun is:

The lightest element is:

This civilization gave Saturn its name:

PRUJETI

RDHOGYNE

ORMAN IRMEPE

VENUS!

Know Your Planets:

This is a picture of Venus. Color in the cross-section drawing below using what you've learned.

Name:

Venus is named after the Roman goddess of love.

Size:

Venus is the sixth largest planet in the solar system and is only slightly smaller than Earth. Earth and Venus are called sister planets because of this.



What's It Made Of?:

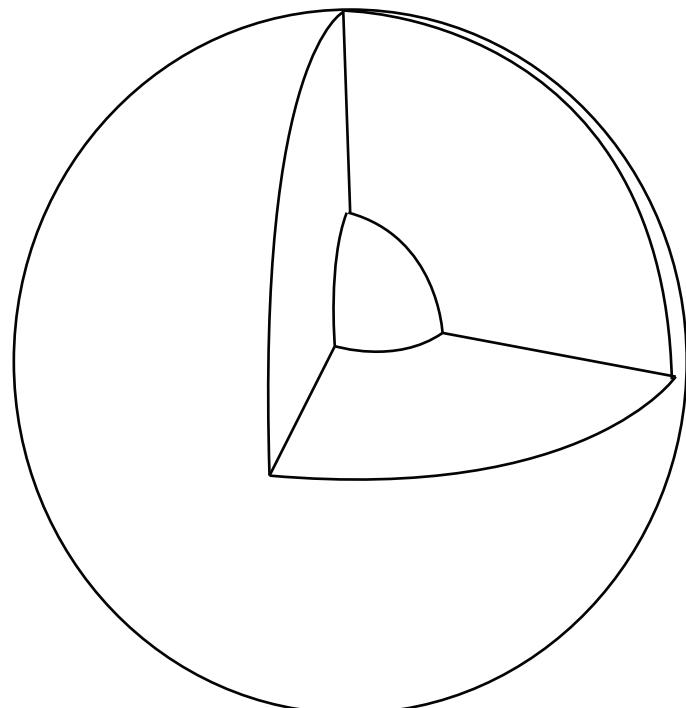
Venus is called a terrestrial planet, which means it is made mostly of rocks and hard substances. Mercury, Earth and Mars are the only other planets considered terrestrial.

Where Is It?:

Venus is the second planet from the sun and is the brightest object in the night sky after the moon. Look for it right after sundown and right before sunrise. It is on average 67 million miles away from the sun and orbits it in the opposite direction of all the other planets.

Surface:

In the picture all we can see is the thick layer of clouds around Venus. On the surface it is mostly volcanic rock with many active volcanoes and many craters. The average high temperature is 860 degrees F!



Scrambles:

Unscramble the words for the answer.

The atmosphere of Venus is 96%
this gas:

RBCNAO XODEIDI

Venus is in this galaxy:

KMLYI YWA

Molten rock is called this:

AVLA

MERCURY!

Know Your Planets:

This is a picture of Mercury. Color in the cross-section drawing below using what you've learned.

Name:

Mercury is named after the Roman god Mercury, messenger of the gods.

Size:

Mercury is the smallest planet in our solar system. Its diameter is one third the size of Earth's.

What's It Made Of?:

Mercury is one of the four terrestrial planets, meaning it is made mostly of rock. Its crust is stone, the mantle in the middle is silicates, and the core is iron.

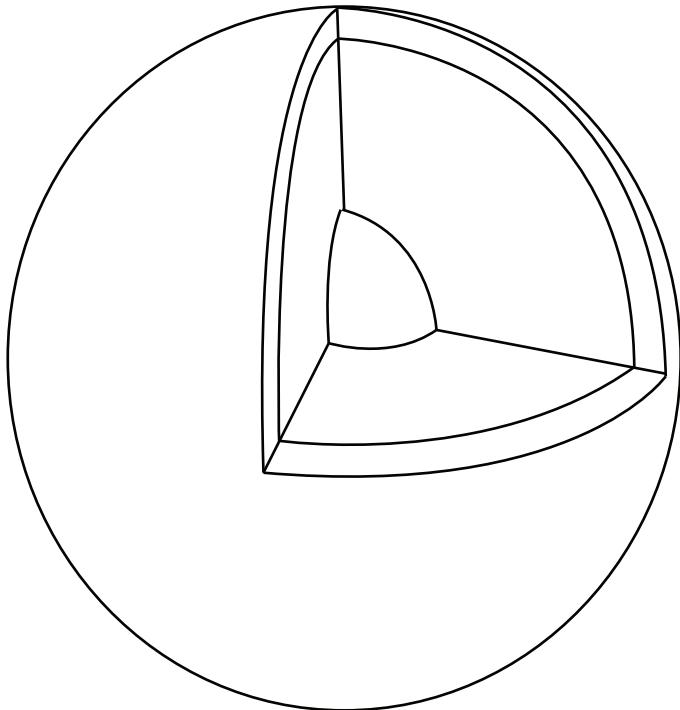


Where Is It?:

Mercury is the closest planet to the sun. Earth is three times farther away.

Orbit and Rotation:

It takes 176 Earth days for Mercury to complete one rotation and 88 Earth days to orbit once around the sun. This means that one day on Mercury lasts 2 years.



Scrambles:

Unscramble the words for the answer.

The section beneath the crust of a planet is called the:

TENALM

Mercury has a strong magnetic field because of this element at its core:

NROI

Mercury is only visible from Earth at these times every day:

SREINUS and TUNSSE

Know Your Planets:

JUPITER!

This is a picture of Jupiter. Color in the cross-section drawing below using what you've learned.

Name:

Jupiter is named after the Roman god Jupiter.

Size:

Jupiter is the largest planet in our solar system by far. 1,300 Earths could fit inside of Jupiter!

What's It Made Of?:

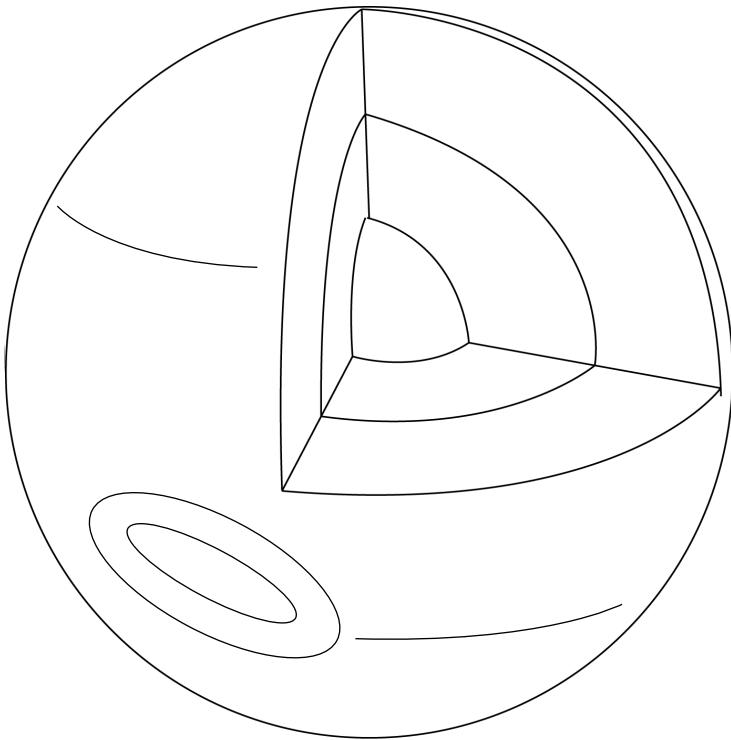
Jupiter is a gas planet, which means almost all of it is made of gases, only a tiny bit at the core is solid. The gases are mostly hydrogen with some helium, methane and water.

Where Is It?:

Jupiter is the fifth planet from the sun and the third brightest object in the sky at night, after the moon and Venus. Jupiter is about 483 million miles away from the sun, which it orbits around once every 11 years.

Weather:

If you look at the picture you can see a large red oval in the lower left of the planet. This is a massive storm on Jupiter. The storm has been going on for at least 300 years and is bigger than Earth.



Scrambles: Unscramble the words for the answer.

The Greek king of the gods is:

The second largest planet is:

One of the four Gas Giants:

ESUZ

UTRSAN

TNUEEPN

MARS!

Know Your Planets:

This is a picture of Mars. Color in the cross-section drawing below using what you've learned.

Name:

Mars is named after the Roman god of war. It is sometimes called the "Red Planet".

Size:

Mars is the seventh largest planet. It is about half the size of Earth and slightly larger than Mercury.

What's It Made Of?:

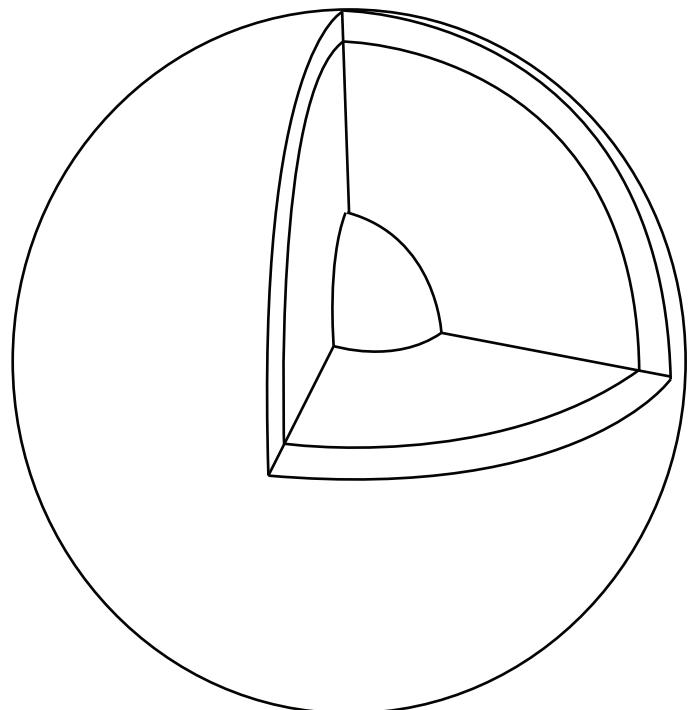
Mars is called a terrestrial planet, which means it is made mostly of rocks. The outer crust contains ice, soil, and rust, which is what makes it look red. The mantle is silicates and the core is iron.

Where Is It?:

Mars is the fourth planet from the sun and the fourth brightest object in the night sky. Earth and Mars are the only two planets that are the right distance away from the sun so that it is not too hot or too cold to support life.

Water and Ice:

At the north and south pole of Mars there are giant sheets of ice, called ice caps. Some scientists believe that there is water beneath the surface. There is evidence on the rocks that at one time there was liquid water on the surface.



Scrambles: Unscramble the words for the answer.

This part of Mars is very thin and is mostly carbon dioxide:

SOHMAPTREE

The seasons on Mars are most like this planet's:

TRAHE

Rocks called this created the many craters on Mars:

ATIREOSD

NEPTUNE!

Know Your Planets:

This is a picture of Neptune. Color in the cross-section drawing below using what you've learned.

Name:

Neptune is named after the Roman god of the sea.

Size:

Neptune is the fourth largest planet in our solar system. It is almost four times larger than Earth. Uranus is its most similar planet.

What's It Made Of?:

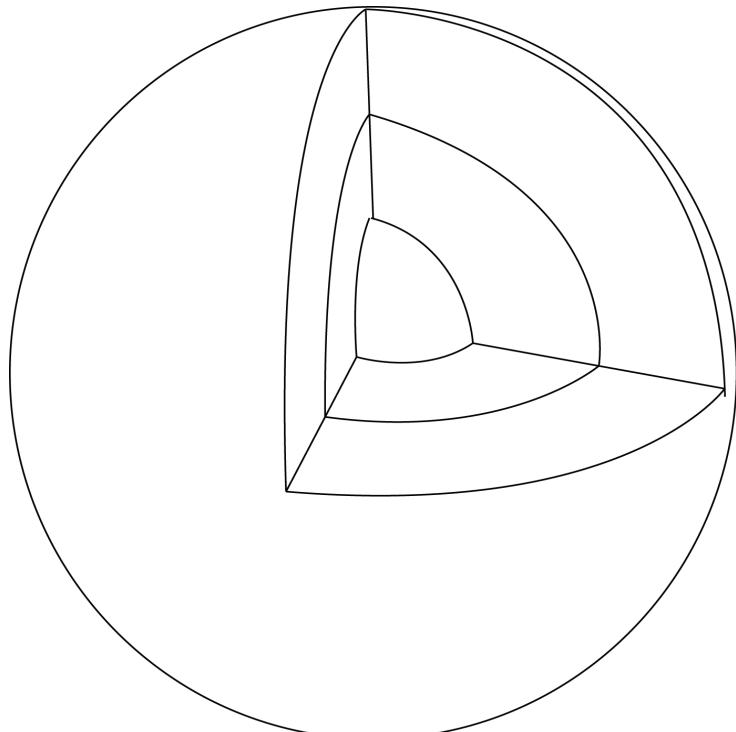
Neptune is one of the four gas giants. The outer crust is mostly helium and hydrogen gases with some methane. The mantle is frozen water, ammonia and methane. The core is ice with some rock and metals.

Where Is It?:

Neptune is the eighth planet from the sun. Of all the recognized planets it is the furthest from the sun.

Rings:

Like Saturn, Uranus and Jupiter, Neptune has rings around it. They may have come from an old moon that was hit and exploded into many tiny pieces. Saturn has the most distinct and visible rings.



Scrambles: Unscramble the words for the answer.

Neptune and Uranus are sometimes called this

CEI NTSIAG

Neptune is most similar to this planet:

USRANU

This element is found in Neptune's core with iron :

NKLCIE

URANUS!

Know Your Planets:

This is a picture of the planet Uranus. Color in the cross-section drawing below using what you've learned.

Name:

Uranus is named after the Ancient Greek god of the sky.

Size:

Uranus is the third largest planet in our solar system. Its diameter is four times larger than Earth's.

What's It Made Of?:

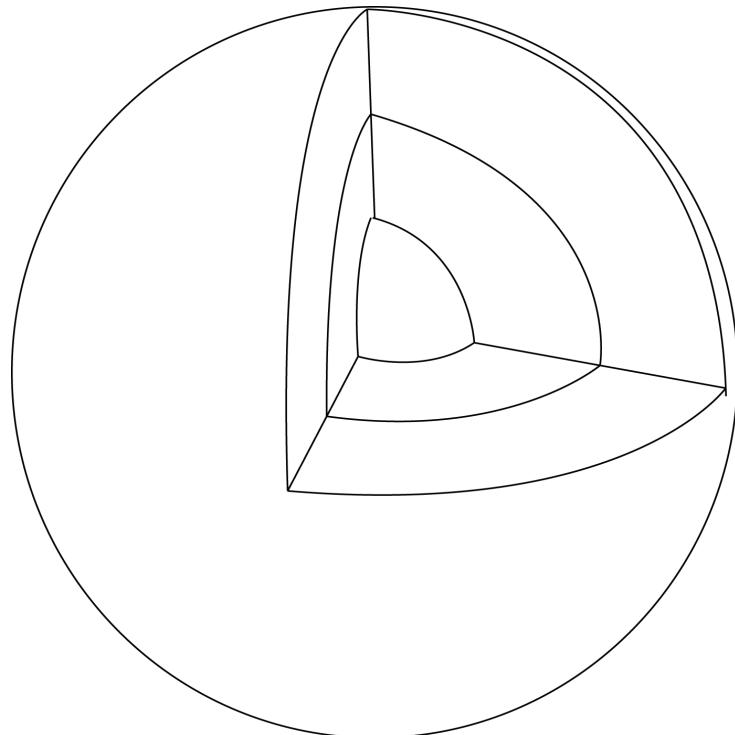
Uranus is one of the four gas giants. The outer crust is mostly helium, hydrogen and methane gases. The mantle in the middle is made out of frozen water, ammonia and methane. The core is ice and rock.

Where Is It?:

Uranus is the seventh planet from the sun. It wasn't discovered until 1781 and can only be seen with a telescope.

Weather:

Because it is so far from the sun and has a very thin atmosphere it is the coldest planet. It can be as cold as -144 degrees F.



Scrambles:

Unscramble the words for the answer.

Uranus was discovered using this tool:

EEPLESCTO

Uranus is most similar to this planet:

TNENUPE

This gas gives the planet its blue color

EMEHNTA

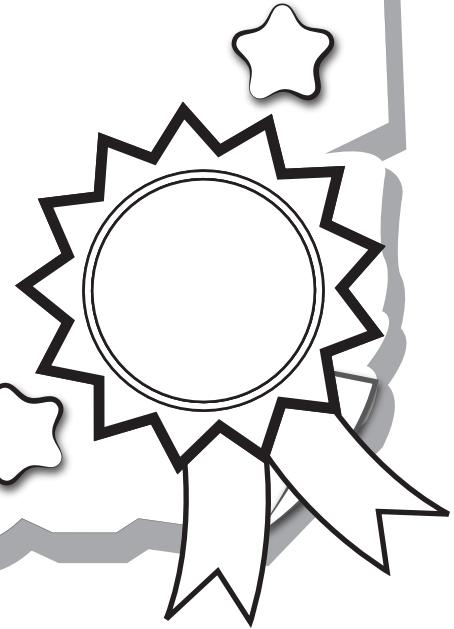
SCIENCE TIME : THE MOON

The moon is not a planet, but a natural satellite that circles the earth. The moon reflects light from the sun, like a mirror can. As the moon orbits earth, sunlight hits different areas of the moon, making it visible. These changes are called phases. At the **New Moon** phase, the moon is very hard to see because it's between the earth and the sun, not lit up. During the **Quarter Moon**, you can see a small part of the moon. When there's a **Full Moon**, it is fully facing the sun causing it to appear fully lit up. Label each phase of the moon below using what you've learned.



Great job!

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Answer Sheets

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Landforms Crossword
Minerals Match Up
Animal Life Crossword
Animal Scramble
Photosynthesis Crossword
Parts of a Flower
The Life Cycle of a Peanut Plant
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Know Your Planets: Neptune!
Know Your Planets: Uranus!
Science Time: The Moon

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Answer Sheet

Nature Trivia

(ANSWER SHEET)

Answer the questions and place the answer in the space provided. Write the letter with the corresponding number below to reveal the hidden nature fact.

1.) Does the sun set in the east or the west?

W E S T
10 9 11 12

2.) A plant takes in carbon dioxide from the air.
What does it release?

O X Y G E N
5 13 14 15 9 6

3.) In which state is the Grand Canyon located?

A R I Z O N A
1 2 3 4 5 6 1

4.) Is the male or female cardinal bright red?

M A L E
7 1 8 9

5.) What is a squirrel's home called?

N E S T
6 9 11 12

6.) What is the largest ocean in the world?

P A C I F I C
16 1 18 3 23 3 18

7.) What bird looks like it is wearing a tuxedo?

P E N G U I N
16 9 6 15 17 3 6

8.) What plant, when it has four leaves,
is considered lucky?

C L O V E R
18 8 5 19 9 2

9.) What is the smallest bird in the
world?

H U M M B E R
20 17 7 7 3 6 15 21 3 2 22

10.) What kind of tree makes syrup?

M A P L E
7 1 16 8 9

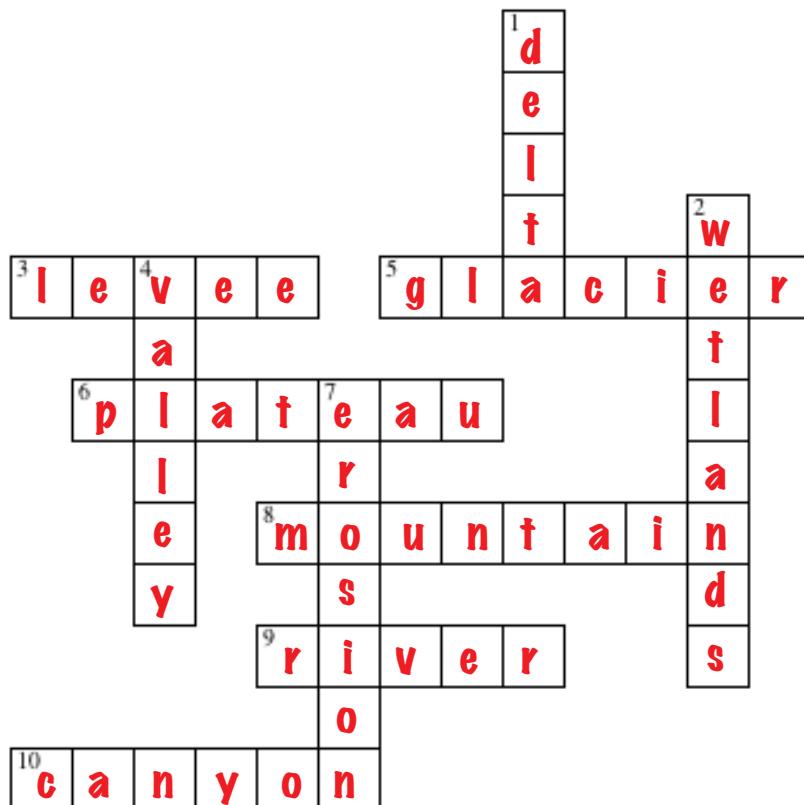
T	H	E	G	R	A	N	D	C	A	N	Y	O	N	W	A	S	C	A	R	V	E	D
12	20	9	15	2	1	6	22	18	1	6	14	5	6	10	1	11	18	1	2	19	9	22
B	Y	T	H	E	C	O	L	O	R	A	D	O	R	I	V	E	R					
21	14	12	20	9	18	5	8	5	2	1	22	5	23	19	9	2						

Answer Sheet

EARTH SCIENCE

Landforms

Complete the crossword puzzle using what you know about the subject. Refer to the word bank if you need help.



Word Bank

levee
delta
river
valley
glacier
mountain
plateau
wetlands
canyon
erosion

Across

3. Embankment usually on the side of a river used to prevent overflowing
 5. Large body of year-round ice & snow that moves slowly across the land and deposits sediment where it melts
 6. Large area of flat land that is higher than the surrounding land
 8. Landform in which the Earth's surface rises higher than 1,000 ft
 9. Large natural stream that flows into a larger body of water
 10. Steep-walled valley created by a river or stream

Down

1. Deposit of sediment where a stream enters a larger body of water
 2. Water ecosystems like saltwater marshes and swamps
 4. Long, low area of land between hills or ranges of mountains
 7. Process of wearing away or moving soil and rock by water, wind, and ice

Answer Sheet

Minerals Match Up

You can find this
in jewelry.

imadond

You can find this
in wedding rings.

olgd

You can find this
in a watch.

tzqrua

You can find this
in some forks,
knives, and
spoons.

vseirl

You can find this
at the end of a
pencil.

pihtegar

You can find this
in a penny.

poerpcc

Unscramble each word to find the names of common minerals that come from the earth. Match each mineral with the object on which you can find them. When you're done color the pictures.

diamond

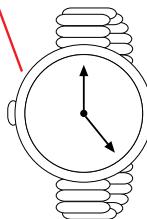
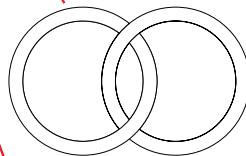
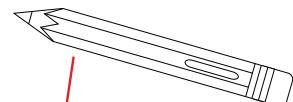
gold

quartz

silver

graphite

copper



Answers

S C I E N C E

Across

Parts of a Flower

- | | |
|-----------|------------|
| 3. pistil | 1. stigma |
| 6. stamen | 2. blossom |
| 7. ovary | 3. petal |
| | 4. sepals |
| | 5. anther |

Down

Animal Life

- | | |
|--------------|---------------|
| 4. amphibian | 1. herbivore |
| 5. carnivore | 2. endangered |
| 7. nocturnal | 3. habitat |
| 8. omnivore | 6. extinct |
| 9. diurnal | |

Across

Photosynthesis

- | | |
|----------------|--------------------|
| 1. chlorophyll | 1. chloroplast |
| 5. oxygen | 2. photosynthesis |
| 7. sunlight | 3. carbon monoxide |
| 8. sugar | 4. green |
| | 6. water |

Down

Answer Sheet

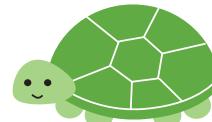
Animal Scramble!

Unscramble the names of the animals.

Use the highlighted letters to unscramble the name of another animal.

Reptiles

UTRELT T**U**RTLE



IATGOLALRALLIGATOR

SANEK S**N**AKE

COCROLIEDC**R**OCODILE

I**G**UANA

Birds

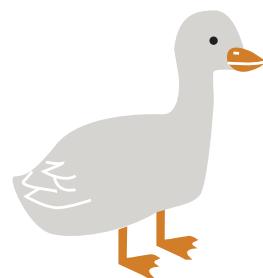
SAWN S**W**AN

OSOEG G**O**OSE

PRARTO P**A**RROT

UCKD D**U**CK

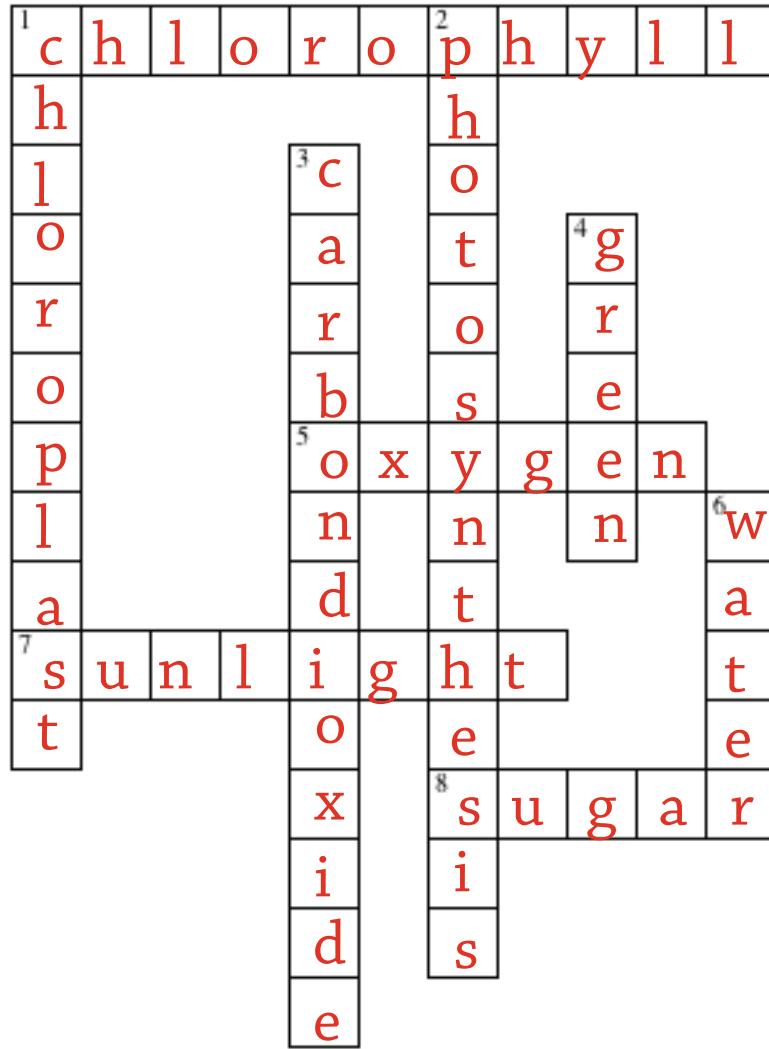
ICENKHC C**H**ICKEN



P**E**NGUIN

Photosynthesis

Complete the crossword puzzle using what you know about the subject. Refer to the word bank if you need help.



Across

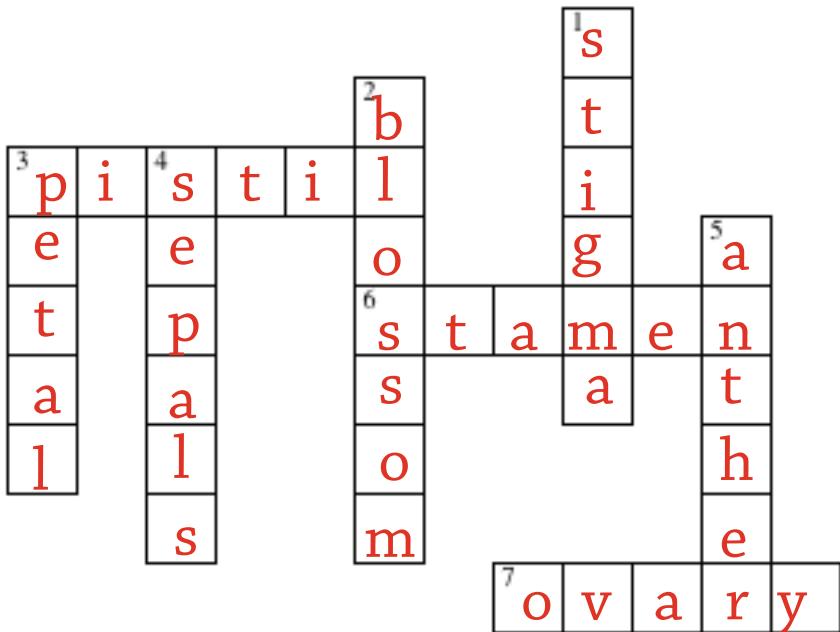
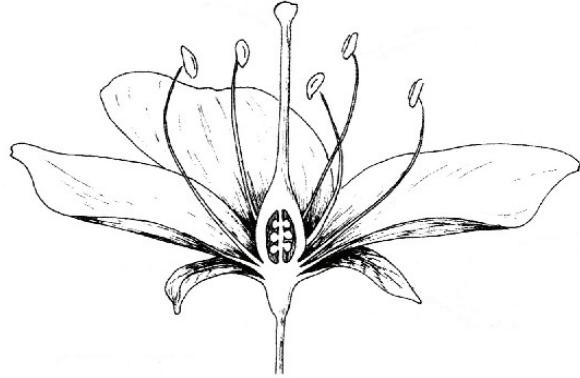
1. Part of a plant cell gathers light energy
5. Waste product of photosynthesis
7. Photosynthesis uses this form of energy to drive the process
8. Compound produced by photosynthesis

Down

1. Part of a plant cell that contains chlorophyll
2. Name of the entire process in which a plant produces its own food
3. One of the two compounds converted during photosynthesis; two words
4. Chlorophyll gives plant life this color
6. Other compound converted during photosynthesis; one word

Parts of a Flower

Complete the crossword puzzle using what you know about the subject. Refer to the word bank if you need help.



Word Bank

pistil
stamen
ovary
sepals
stigma
anther
blossom
petal

Across

- 3. Pollen travels through this tube
 - 6. Provides support for the pollen maker
 - 7. Contains the egg cells

Down

1. Traps pollen
 2. Reproductive structure found on many plants called a flower or this
 3. Attracts insects and birds
 4. Protected the flower bud before it opened
 5. Makes pollen

Answer Sheet

Science

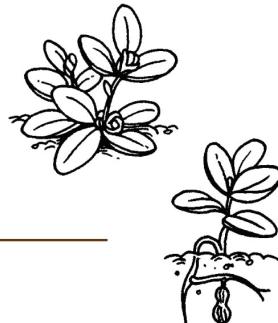
THE LIFE CYCLE OF A PEANUT PLANT



In spite of its name, the peanut is not a nut. It is a legume. Beans, peas, and lentils are other types of legumes. Learn about the life cycle of the peanut through the activities below.

Use a word from the word bank to complete each sentence. Then number the sentences in the order of the life cycle that the peanut goes through.

2 Little petals grow on the lower parts of the plants.



5 The peanuts grow inside a pod under the ground.



3 When the flowers die, a special stem grows down from each flower.



4 This stem is called a peg.



1 Farmers plant peanut seeds in long rows.



Use this box to draw a picture of a peanut plant. Show and label as many parts as you can.



Answer Sheet

EARTH!

Know Your Planets:

This is a picture of Earth, our home planet. Color in the cross-section drawing below using what you've learned.

Name:

Earth is named after the Ancient Greek goddess of mountains and streams.

Size:

Earth is the fifth largest planet in our solar system. Earth and Venus are nearly the same size, but Earth is slightly larger.

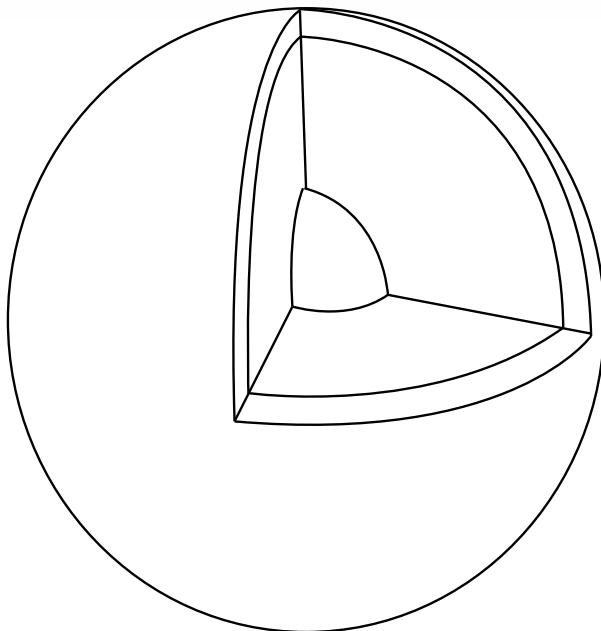
What's It Made Of?:

Earth is called a terrestrial planet, which means it is made mostly of rocks. The outer crust contains rocks and metals such as iron and magnesium. The mantle is made of metals and silicates. The core is made of liquid and solid iron and nickel.



Where Is It?:

Earth is the third planet from the sun. Earth and Mars are the only two planets that are the right distance away from the sun so that it is not too hot or too cold to support life.



Scrambles: Unscramble the words for the answer.

70% of the Earth's surface is covered with this:

LTSA RTEWA

SALT WATER

Earth's internal heat comes from this section:

REOC

CORE

This protects the Earth from the sun's radiation:

ZOEON

OZONE

Answer Sheet

Know Your Planets:

SATURN!

This is a picture of Saturn. Color in the cross-section drawing below using what you've learned.



Name:

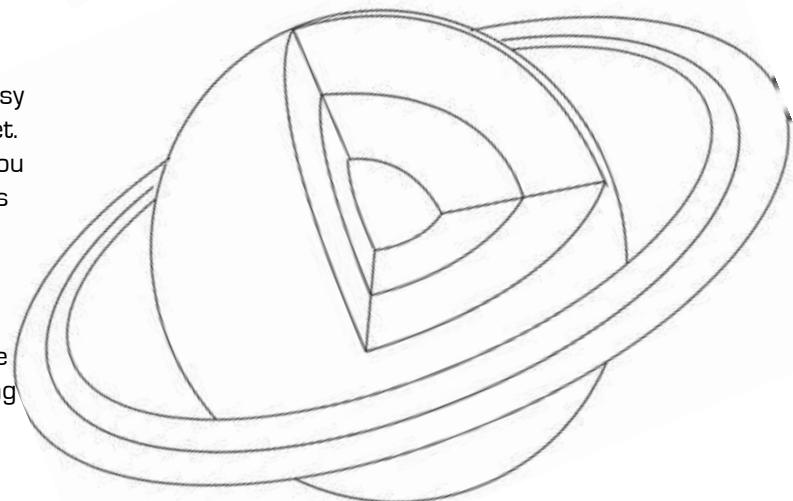
Saturn is named after the Roman god Saturn.

Size:

Saturn is the second largest planet in the solar system. 763 Earths could fit inside of Saturn!

What's It Made Of?:

Saturn is considered one of the gas giants along with Jupiter, Uranus and Neptune. It has a rocky core but is mostly made of hydrogen and helium gas.



Where Is It?:

Saturn is the sixth planet from the sun. It is not easy to spot at night. It is the fifth brightest visible planet. It is a yellow point in the sky but with a telescope you can see its rings. It is on average 888 million miles away from the sun!

Rings:

Saturn has nine rings. They are made mostly of ice with some dust. Saturn also has 62 moons orbiting it and most of them have names!

Scrambles:

Unscramble the words for the answer.

The fifth planet from the sun is:

PRUJETI

JUPITER

The lightest element is:

RDHOGYNE

HYDROGEN

This civilization gave Saturn its name:

ORMAN IRMEPE

ROMAN EMPIRE

Answer Sheet

Know Your Planets:

VENUS!

This is a picture of Venus. Color in the cross-section drawing below using what you've learned.

Name:

Venus, named after the Roman goddess of love.

Size:

Venus is the sixth largest planet in the solar system and is only slightly smaller than Earth. Earth and Venus are called sister planets because of this.

What's It Made Of?:

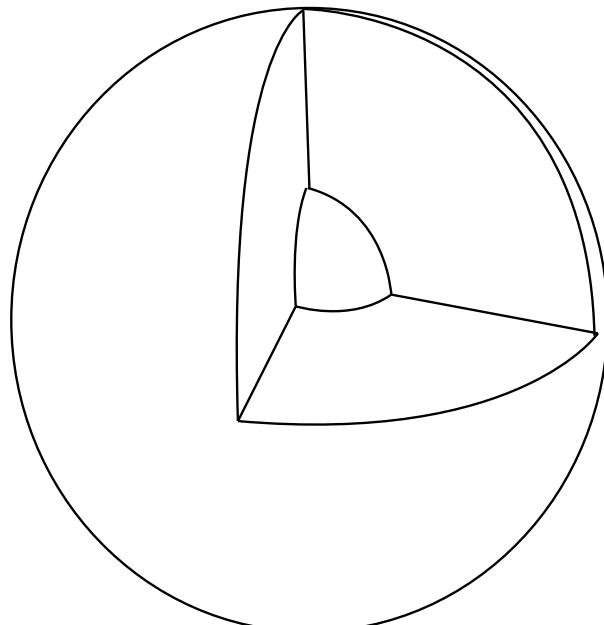
Venus is called a terrestrial planet, which means it is made mostly of rocks and hard substances. Mercury, Earth and Mars are the only other planets considered terrestrial.

Where is it?:

Venus is the second planet from the sun and is the brightest object in the night sky after the moon. Look for it right after sundown and right before sunrise. It is on average 67 million miles away from the sun and orbits it in the opposite direction of all the other planets

Surface:

In the picture all we can see is the thick layer of clouds around Venus. On the surface it is mostly volcanic rock with many active volcanoes and many craters. The average high temperature is 860 degrees!



Scrambles: Unscramble the words for the answer.

The atmosphere of Venus is 96%
this gas:

RBCNAO XODEIDI
CARBON DIOXIDE

Venus is in this galaxy:

KMLYI YWA
MILKY WAY

Molten rock is called this:

AVLA
LAVA

Answer Sheet

Know Your Planets:

MERCURY!

This is a picture of Mercury. Color in the cross-section drawing below using what you've learned.

Name:

Mercury is named after the Roman god Mercury, messenger of the gods.

Size:

Mercury is the smallest planet in our solar system. Its diameter is one third the size of Earth's.

What's It Made Of?:

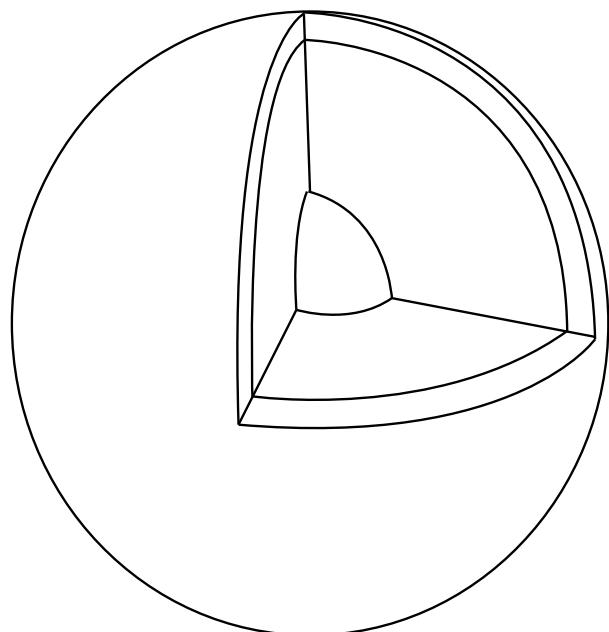
Mercury is one of the four terrestrial planets, meaning it is made mostly of rock. Its crust is stone, the mantle in the middle is silicates, and the core is iron.

Where Is It?:

Mercury is the closest planet to the sun. Earth is three times farther away.

Orbit and Rotation:

It takes 176 Earth days for Mercury to complete one rotation and 88 Earth days to orbit once around the sun. This means that one day on Mercury lasts 2 years.



Scrambles: Unscramble the words for the answer.

The section beneath the crust of a planet is called the:

TENALM
MANTLE

Mercury has a strong magnetic field because of this element at its core:

NROI
IRON

Mercury is only visible from Earth at these times every day:

SREINUS and TUNSSE
SUNRISE AND SUNSET

Answer Sheet

Know Your Planets:

JUPITER!

This is a picture of Jupiter. Color in the cross-section drawing below using what you've learned.

Name:

Jupiter is named after the Roman god Jupiter.

Size:

Jupiter is the largest planet in our solar system by far. 1,300 Earths could fit inside of Jupiter!

What's It Made Of?:

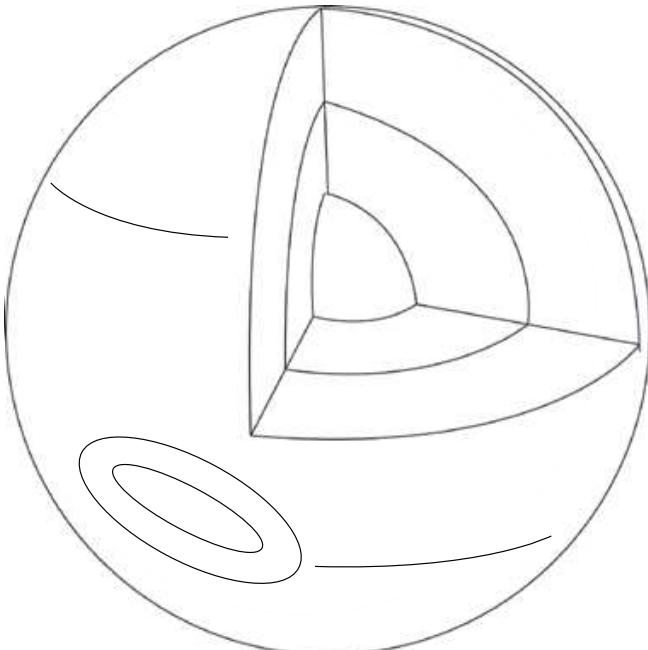
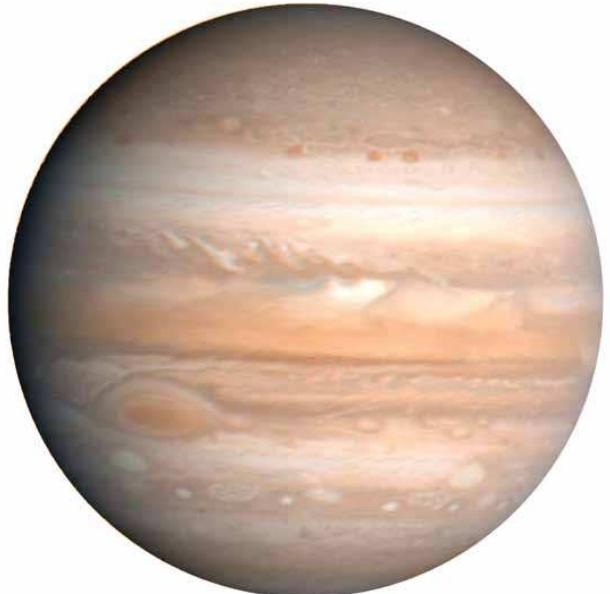
Jupiter is a gas planet, which means almost all of it is made of gases, only a tiny bit at the core is solid. The gases are mostly hydrogen with some helium, methane and water.

Where Is It?:

Jupiter is the fifth planet from the sun and the third brightest object in the sky at night, after the moon and Venus. Jupiter is about 483 million miles away from the sun, which it orbits around once every 11 years.

Weather:

If you look at the picture you can see a large red oval in the lower left of the planet. This is a massive storm on Jupiter. The storm has been going on for at least 300 years and is bigger than Earth.



Scrambles: Unscramble the words for the answer.

The Greek king of the gods is:

ESUZ

ZEUS

The second largest planet is:

UTRSAN

SATURN

One of the four Gas Giants:

TNUEEPN

NEPTUNE

Answer Sheet

MARS!

Know Your Planets:

This is a picture of Mars. Color in the cross-section drawing below using what you've learned.

Name:

Mars is named after the Roman god of war. It is sometimes called the "Red Planet".

Size:

Mars is the seventh largest planet. It is about half the size of Earth and slightly larger than Mercury.

What's It Made Of?:

Mars is called a terrestrial planet, which means it is made mostly of rocks. The outer crust contains ice, soil, and rust, which is what makes it look red. The mantle is silicates and the core is iron.

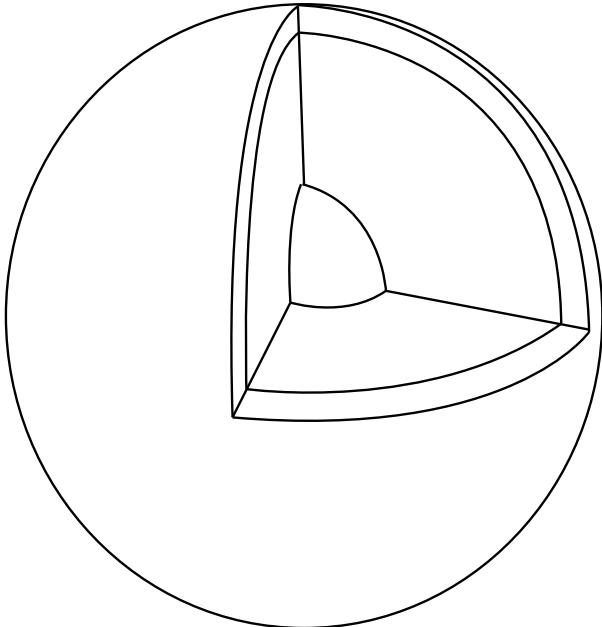


Where Is It?:

Mars is the fourth planet from the sun and the fourth brightest object in the night sky. Earth and Mars are the only two planets that are the right distance away from the sun so that it is not too hot or too cold to support life.

Water and Ice:

At the north and south pole of Mars there are giant sheets of ice, called ice caps. Some scientists believe that there is water beneath the surface. There is evidence on the rocks that at one time there was liquid water on the surface.



Scrambles: Unscramble the words for the answer.

This part of Mars is very thin and is mostly carbon dioxide:

SOHMAPTREE

ATMOSPHERE

The seasons on Mars are most like this planet's:

TRAHE

EARTH

Rocks called this created the many craters on Mars:

ATIREOSD

ASTEROIDS

Answer Sheet

Know Your Planets:

NEPTUNE!

This is a picture of Neptune. Color in the cross-section drawing below using what you've learned.

Name:

Neptune is named after the Roman god of the sea.

Size:

Neptune is the fourth largest planet in our solar system. It is almost four times larger than Earth. Uranus is its most similar planet.

What's It Made Of?:

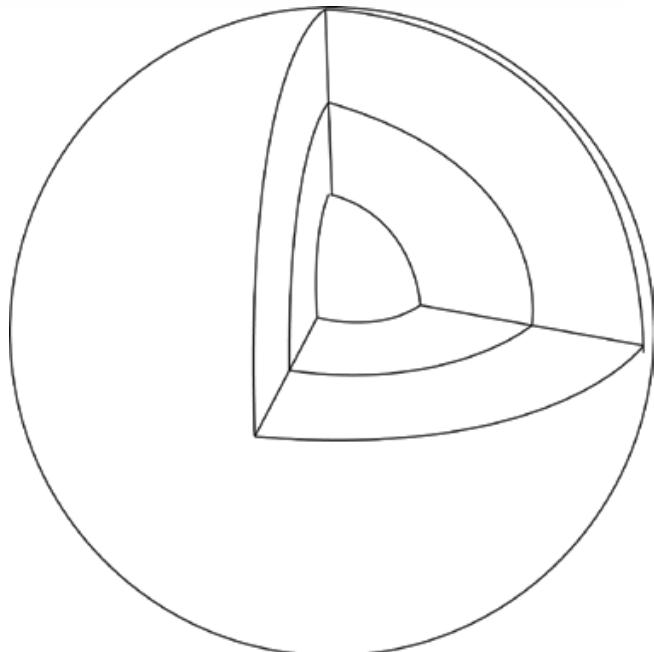
Neptune is one of the four gas giants. The outer crust is mostly helium and hydrogen gases with some methane. The mantle is frozen water, ammonia and methane. The core is ice with some rock and metals.

Where Is It?:

Neptune is the eighth planet from the sun. Of all the recognized planets it is the furthest from the sun.

Rings:

Like Saturn, Uranus and Jupiter, Neptune has rings around it. They may have come from an old moon that was hit and exploded into many tiny pieces. Saturn has the most distinct and visible rings.



Scrambles: Unscramble the words for the answer.

Neptune and Uranus are sometimes called this

CEI NTSIAG

ICE GIANTS

Neptune is most similar to this planet:

USRANU

URANUS

This element is found in Neptune's core with iron :

NKLCIE

NICKEL

Answer Sheet

Know Your Planets:

URANUS!

This is a picture of the planet Uranus. Color in the cross-section drawing below using what you've learned.

Name:

Uranus is named after the Ancient Greek god of the sky.

Size:

Uranus is the third largest planet in our solar system. Its diameter is four times larger than Earth's.

What's It Made Of?:

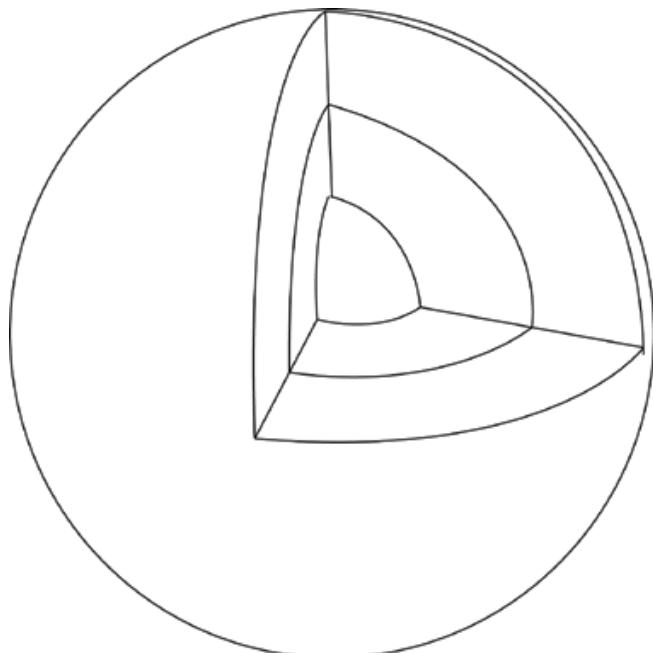
Uranus is one of the four gas giants. The outer crust is mostly helium, hydrogen and methane gases. The mantle in the middle is made out of frozen water, ammonia and methane. The core is ice and rock.

Where Is It?:

Uranus is the seventh planet from the sun. It wasn't discovered until 1781 and can only be seen with a telescope.

Weather:

Because it is so far from the sun and has a very thin atmosphere it is the coldest planet. It can be as cold as -144 degrees F.



Scrambles: Unscramble the words for the answer.

Uranus was discovered using this tool:

EEPLESCTO

TELESCOPE

Uranus is most similar to this planet:

TNENUPE

NEPTUNE

This gas gives the planet its blue color

EMEHNTA

METHANE

Answer Sheet

SCIENCE TIME: THE MOON

The moon is not a planet, but a natural satellite that circles the earth. The moon reflects light from the sun, like a mirror can. As the moon orbits earth, sunlight hits different areas of the moon, making it visible. These changes are called phases. At the **New Moon** phase, the moon is very hard to see because it's between the earth and the sun, not lit up. During the **Quarter Moon**, you can see a small part of the moon. When there's a **Full Moon**, it is fully facing the sun causing it to appear fully lit up.

Label each phase of the moon below using what you've learned.



new moon

quarter moon

full moon