THE SOLAR SYSTEM Worksheets UNIT 2

Raül Martínez Verdún

October-December 2009

NAME: DATE: Worksheet 7

4 Read and match the boxes from the right with the names from the left.

- 1. THE SUN
- 2. EARTH
- 3. JUPITER
- 4. SATURN
- 5. VENUS
- 6. MARS
- 7. MERCURY
- 8. NEPTUNE
- 9. URANUS

- A. THIS GAS GIANT IS THE THIRD-LARGEST PLANET IN OUR SOLAR SYSTEM AND THE SEVENTH FROM SUN.
- B. 75% OF ITS SURFACE IS COVERED BY WATER. THE LENGTH OF ITS YEAR IS 365.26 DAYS.
- C. IT MEASURES ABOUT 15,000 BILLION KM ACROSS AND IT CONTAINS 750 TIMES MORE MATTER THAN ALL THE OTHER BODIES IN THE SOLAR SYSTEM PUT TOGETHER.
- D. IT IS A GAS GIANT FAMOUS FOR ITS BEAUTIFUL BRIGHT RINGS. ABOUT 60 LARGE MOONS MOVE AROUND IT.
- E. IT IS THE BIGGEST PLANET. IT HAS A GREAT RED SPOT WHICH IN FACT IS A HUGE STORM.
- F. IT IS THE SMALLEST PLANET OF THE GAS GIANTS AND IT IS THE MOST DISTANT PLANET IN OUR SOLAR SYSTEM.
- G. IT IS KNOWN AS THE RED PLANET. SCIENTISTS THINK LIFE EXISTED ON IT A LONG TIME AGO.
- H. IT IS THE SMALLEST OF ALL THE PLANETS. BECAUSE OF ITS ROCKY SURFACE, IT LOOKS LIKE THE MOON.
- I. IT IS THE CLOSEST PLANET TO EARTH AND THE THIRD SMALLEST IN THE SOLAR SYSTEM.

NAME:	DATE:	Worksheet 8

Read these sentences carefully and decide in groups if they are "true" or "false".

	FACTS ABOUT THE PLANETS AND THE SOLAR SYSTEM
S1	MARS LOOKS RED BECAUSE ITS ROCKS CONTAIN A LOT OF IRON DUST.
S2	THE SUN IS AN ENORMOUS YELLOW PLANET, THE BIGGEST IN THE SOLAR SYSTEM.
S3	ALL THE PLANETS ORBIT THE SUN.
S4	THE FOUR INNER PLANETS ARE MADE UP MAINLY OF GASES.
S5	A DAY IN THE EARTH TAKES 27.6 HOURS.
S6	A SPACECRAFT COULD LAND ON JUPITER'S SURFACE WITHOUT PROBLEMS.
S7	VENUS IS THE HOTTEST PLANET, EVEN HOTTER THAN MERCURY.
S8	NEPTUNE IS THE FARTHEST PLANET FROM THE SUN

	_	
NAME:	DATE:	Worksheet 9A

MERCURY
Mercury is the nearest planet to the Sun and it moves around it incredibly quickly -
, which is the same as four complete journeys around the Sun every year.
, they would be four times older than their Earth age! It moves so
quickly that it can only be seen from Earth six times a year.
Mercury is the smallest of all the planets. It has a very thin atmosphere and weather doesn't
exist at all on this planet. Because of this, Mercury is not able to hold on to any heat from the
Sun, so very cold. Opposite to this, during the day,
when temperatures are four or five times greater than the hottest places on Earth.
With a lot of craters on its surface, Mercury's rocky surface looks a lot like the Moon. The craters
were caused by asteroid impacts and most of these craters were made billions years ago, shortly
after the Solar System formed.
MERCURY
MERCURY to the Sun and it moves around it incredibly quickly -once every
to the Sun and it moves around it incredibly quickly –once every
to the Sun and it moves around it incredibly quickly –once every 88 days or, which is the same as four complete journeys around the Sun every year.
to the Sun and it moves around it incredibly quickly –once every 88 days or, which is the same as four complete journeys around the Sun every year, they would be four times older than their Earth age! It moves so
to the Sun and it moves around it incredibly quickly —once every 88 days or, which is the same as four complete journeys around the Sun every year, they would be four times older than their Earth age! It moves so quickly that it can only be seen from Earth six times a year.
to the Sun and it moves around it incredibly quickly —once every 88 days or, which is the same as four complete journeys around the Sun every year. , they would be four times older than their Earth age! It moves so quickly that it can only be seen from Earth six times a year. of all the planets. It has a very thin atmosphere and weather doesn't exist at all on this planet. Because of this, Mercury is not able to hold on to any heat from the
to the Sun and it moves around it incredibly quickly –once every 88 days or, which is the same as four complete journeys around the Sun every year.

NAME:	DATE:	Worksheet 9B

MERCURY
to the Sun and it moves around it incredibly quickly –
, which is the same as four complete journeys around the Sun every
year. If people moved to Mercury, they would be four times older than their Earth age! It moves
so quickly that it can only be seen from Earth six times a year.
of all the planets. It has a very thin atmosphere and weather doesn't
exist at all on this planet. Because of this, Mercury is not able to hold on to any heat from the
Sun, sovery cold. Opposite to this, Mercury is really hot during the day,
_
when temperatures are four or five times greater than the hottest places on Earth.
With a lot of craters on its surface, Mercury's rocky surface looks a lot like the Moon. The craters
were caused by asteroid impacts and most of these craters were made billions years ago, shortly
after the Solar System formed.
VENUS
Venus is the closest planet to Earth and the third smallest in the Solar System. It is almost the
Venus is the closest planet to Earth and the third smallest in the Solar System. It is almost the same size and it is made up of the same type of metals and rocks as Earth; for these reasons, Venus is often said to be Venus is the second planet from the Sun and
Venus is the closest planet to Earth and the third smallest in the Solar System. It is almost the same size and it is made up of the same type of metals and rocks as Earth; for these reasons,
Venus is the closest planet to Earth and the third smallest in the Solar System. It is almost the same size and it is made up of the same type of metals and rocks as Earth; for these reasons, Venus is often said to be Venus is the second planet from the Sun and was given its name by the Romans in allusion to their goddess of love, because of its brightness and beauty.
Venus is the closest planet to Earth and the third smallest in the Solar System. It is almost the same size and it is made up of the same type of metals and rocks as Earth; for these reasons, Venus is often said to be Venus is the second planet from the Sun and was given its name by the Romans in allusion to their goddess of love, because of its brightness
Venus is the closest planet to Earth and the third smallest in the Solar System. It is almost the same size and it is made up of the same type of metals and rocks as Earth; for these reasons, Venus is often said to be Venus is the second planet from the Sun and was given its name by the Romans in allusion to their goddess of love, because of its brightness and beauty, so we cannot see its desert-like surface with telescopes.
Venus is the closest planet to Earth and the third smallest in the Solar System. It is almost the same size and it is made up of the same type of metals and rocks as Earth; for these reasons, Venus is often said to be Venus is the second planet from the Sun and was given its name by the Romans in allusion to their goddess of love, because of its brightness and beauty, so we cannot see its desert-like surface with telescopes. Apart from that, its atmosphere is burning hot and poisonous. The pressure of its atmosphere is
Venus is the closest planet to Earth and the third smallest in the Solar System. It is almost the same size and it is made up of the same type of metals and rocks as Earth; for these reasons, Venus is often said to be Venus is the second planet from the Sun and was given its name by the Romans in allusion to their goddess of love, because of its brightness and beauty, so we cannot see its desert-like surface with telescopes. Apart from that, its atmosphere is burning hot and poisonous. The pressure of its atmosphere is enormous –equal to!

NAME:	DATE:	Worksheet 9C

VENUS	
Venus is the closest planet to Earth and It is almost	the
same size and it is made up of the same type of metals and rocks as Earth; for these reaso	ns,
Venus is often said to be the Earth's "twin sister". Venus is the second planet from the Sun a	and _
was given its name by the Romans in allusion to their goddess of love, because of its brightness	ess
and beauty.	
, so we cannot see its desert-like surface with telescop	es.
Apart from that, its atmosphere is burning hot and poisonous its atmosphere	e is
enormous –equal to 1000m below sea level!	I
The yellow clouds in the sky are full of a harmful acid. That means that if we were on Venus a	and [
it rained, it would burn our skin. What's more, there are no rivers, seas, or oceans on	the I
surface of Venus. Venus also to Earth and the other planets.	•
	_
VENUS	
Venus is the closest planet to Earth and It is almost	
Venus is the closest planet to Earth and It is almost	ns,
Venus is the closest planet to Earth and It is almost same size and it is made up of the same type of metals and rocks as Earth; for these reasons	ns, and
Venus is the closest planet to Earth and It is almost same size and it is made up of the same type of metals and rocks as Earth; for these reaso Venus is often said to be Venus is the second planet from the Sun a	ns, and
Venus is the closest planet to Earth and It is almost same size and it is made up of the same type of metals and rocks as Earth; for these reason venus is often said to be Venus is the second planet from the Sun as was given its name by the Romans in allusion to their goddess of love, because of its brightness.	ens, and ess
Venus is the closest planet to Earth and It is almost same size and it is made up of the same type of metals and rocks as Earth; for these reason venus is often said to be Venus is the second planet from the Sun as given its name by the Romans in allusion to their goddess of love, because of its brightness and beauty.	ess ees.
Venus is the closest planet to Earth and	ess ees.
Venus is the closest planet to Earth and	ess ess es.
Venus is the closest planet to Earth and	ess ees. e is

NAME:	DATE:	Worksheet 9D

EARTH
Our home planet is the largest of the four inner planets. Along with its satellite, the Moon, it
moves around the Sun once a year. Its atmosphere contains
The surface is made up of a rocky thin layer or crust, floating on melted rocks below. This liquid
beneath the The Earth's surface includes the continents and the ocean
floor.
What makes Earth unique is the fact that life exists on it, since no other planet in our Solar
System has life. As an example, the Sun may be an ordinary kind of star, but the third planet out
from the Sun (Earth) is unique. The Earth is neither so hot that water boils nor so cold that it
freezes.
As the, different parts of the Earth get more or less light and
warmth from the Sun, making the different seasons. But the Earth also spins on its own axis,
which in fact it is an imaginary line through
EARTH Our home planet is the largest of the four inner planets. Along with
Our home planet is the largest of the four inner planets. Along with,, it
Our home planet is the largest of the four inner planets. Along with,, it moves around the Sun once a year. Its atmosphere contains oxygen and carbon dioxide gases.
Our home planet is the largest of the four inner planets. Along with,, it moves around the Sun once a year. Its atmosphere contains oxygen and carbon dioxide gases. The surface is made up of a rocky thin layer or crust, floating on melted rocks below. This liquid
Our home planet is the largest of the four inner planets. Along with,, it moves around the Sun once a year. Its atmosphere contains oxygen and carbon dioxide gases. The surface is made up of a rocky thin layer or crust, floating on melted rocks below. This liquid beneath the The Earth's surface includes the continents and the ocean
Our home planet is the largest of the four inner planets. Along with,, it moves around the Sun once a year. Its atmosphere contains oxygen and carbon dioxide gases. The surface is made up of a rocky thin layer or crust, floating on melted rocks below. This liquid beneath the The Earth's surface includes the continents and the ocean floor.
Our home planet is the largest of the four inner planets. Along with,, it moves around the Sun once a year. Its atmosphere contains oxygen and carbon dioxide gases. The surface is made up of a rocky thin layer or crust, floating on melted rocks below. This liquid beneath the The Earth's surface includes the continents and the ocean floor. What makes Earth unique is the fact that life exists on it, since no other planet in our Solar
Our home planet is the largest of the four inner planets. Along with,, it moves around the Sun once a year. Its atmosphere contains oxygen and carbon dioxide gases. The surface is made up of a rocky thin layer or crust, floating on melted rocks below. This liquid beneath the The Earth's surface includes the continents and the ocean floor. What makes Earth unique is the fact that life exists on it, since no other planet in our Solar System has life. As an example, the Sun may be an, but the third planet out
Our home planet is the largest of the four inner planets. Along with,, it moves around the Sun once a year. Its atmosphere contains oxygen and carbon dioxide gases. The surface is made up of a rocky thin layer or crust, floating on melted rocks below. This liquid beneath the The Earth's surface includes the continents and the ocean floor. What makes Earth unique is the fact that life exists on it, since no other planet in our Solar System has life. As an example, the Sun may be an, but the third planet out from the Sun (Earth) is unique. The Earth is neither so hot that water boils nor so cold that it
Our home planet is the largest of the four inner planets. Along with,, it moves around the Sun once a year. Its atmosphere contains oxygen and carbon dioxide gases. The surface is made up of a rocky thin layer or crust, floating on melted rocks below. This liquid beneath the The Earth's surface includes the continents and the ocean floor. What makes Earth unique is the fact that life exists on it, since no other planet in our Solar System has life. As an example, the Sun may be an, but the third planet out from the Sun (Earth) is unique. The Earth is neither so hot that water boils nor so cold that it freezes.
Our home planet is the largest of the four inner planets. Along with,, it moves around the Sun once a year. Its atmosphere contains oxygen and carbon dioxide gases. The surface is made up of a rocky thin layer or crust, floating on melted rocks below. This liquid beneath the The Earth's surface includes the continents and the ocean floor. What makes Earth unique is the fact that life exists on it, since no other planet in our Solar System has life. As an example, the Sun may be an, but the third planet out from the Sun (Earth) is unique. The Earth is neither so hot that water boils nor so cold that it freezes. As the Earth moves around the Sun, different parts of the Earth get more or less light and
Our home planet is the largest of the four inner planets. Along with,, it moves around the Sun once a year. Its atmosphere contains oxygen and carbon dioxide gases. The surface is made up of a rocky thin layer or crust, floating on melted rocks below. This liquid beneath the The Earth's surface includes the continents and the ocean floor. What makes Earth unique is the fact that life exists on it, since no other planet in our Solar System has life. As an example, the Sun may be an, but the third planet out from the Sun (Earth) is unique. The Earth is neither so hot that water boils nor so cold that it

NAME:	DATE:	Worksheet 9E

EARTH
Our home planet is the largest of the four inner planets. Along with,, it
moves around the Sun once a year. Its atmosphere contains
The surface is made up of a rocky thin layer or crust, floating on melted rocks below. This liquid
beneath the surface is called magma. The Earth's surface includes the continents and the ocean
floor.
What makes Earth unique is the fact that life exists on it, since no other planet in our Solar
System has life. As an example, the Sun may be an, but the third planet out
from the Sun (Earth) is unique. The Earth is neither so hot that water boils nor so cold that it
freezes.
As the, different parts of the Earth get more or less light and
warmth from the Sun, making the different seasons. But the Earth also spins on its own axis,
which in fact it is an imaginary line through the planet from pole to pole.
MARS
Mars is smaller and colder than Earth. Being the fourth planet from the Sun, Mars is known as
the Red Planet because of its red-brown colour. Its surface is covered with dusty plains, hills, tall
mountains and deep canyons in which we would not be able to
breathe. However, of all the planets in the Solar System,
Mars takes nearly two years to orbit the Sun (687 Earth days). What's more, a day on Mars is
just a little longer than our own day, also having its own seasons. Mars has two tiny moons
called
The highest mountain on Mars is called Olympus Mons and is three times higher than Mount
Everest. Since in August 1996 NASA claimed it had discovered traces of fossil bacteria in a
meteorite from Mars, it is believed that on the planet a long time
ago.

NAME:	DATE:	Worksheet 9F

MARS
Mars is smaller and colder than Earth. Being, Mars is known as
the Red Planet because of its red-brown colour. Its surface is covered with dusty plains, hills, tall
mountains and deep canyons. It has just a thin atmosphere in which we would not be able to
oreathe. However, of all the planets in the Solar System,
Mars takes nearly two years to orbit the Sun (). What's more, a day on Mars is
ust a little longer than our own day, also having its own seasons. Mars has two tiny moons called Deimos and Phobos.
The highest mountain on Mars is called Olympus Mons and is three times higher than Mount
Everest. Since in August 1996 NASA claimed it had discovered traces of fossil bacteria in a
meteorite from Mars, it is believed that on the planet a long time
ago.
Mars is smaller and colder than Earth. Being, Mars is known as
Mars is smaller and colder than Earth. Being, Mars is known as the Red Planet because of its red-brown colour. Its surface is covered with dusty plains, hills, tall
Mars is smaller and colder than Earth. Being, Mars is known as the Red Planet because of its red-brown colour. Its surface is covered with dusty plains, hills, tall mountains and deep canyons in which we would not be able to
Mars is smaller and colder than Earth. Being, Mars is known as the Red Planet because of its red-brown colour. Its surface is covered with dusty plains, hills, tall mountains and deep canyons in which we would not be able to breathe. However, of all the planets in the Solar System, Mars is the most similar to Earth.
Mars is smaller and colder than Earth. Being, Mars is known as the Red Planet because of its red-brown colour. Its surface is covered with dusty plains, hills, tall mountains and deep canyons in which we would not be able to breathe. However, of all the planets in the Solar System, Mars is the most similar to Earth. Mars takes nearly two years to orbit the Sun (). What's more, a day on Mars is
Mars is smaller and colder than Earth. Being
Mars is smaller and colder than Earth. Being, Mars is known as the Red Planet because of its red-brown colour. Its surface is covered with dusty plains, hills, tall mountains and deep canyons in which we would not be able to breathe. However, of all the planets in the Solar System, Mars is the most similar to Earth. Mars takes nearly two years to orbit the Sun (). What's more, a day on Mars is ust a little longer than our own day, also having its own seasons. Mars has two tiny moons called
Mars is smaller and colder than Earth. Being

NAME:	DATE:	Worksheet 9G

JUPITER
upiter is the Solar System's biggest planet. In fact, it is so big that more than 1,300 Earths
vould fit inside it. Like the other gas giants, its, with a small
ocky core at the centre. It seems incredible, but Jupiter's powerful gravity has dragged many
assing objects towards it, becoming some of them becoming the planet's moons.
upiter spins on its axis It spins faster than any other planet, so fast that
he clouds in its atmosphere are huge swirling storms with strong winds of up 500 km/h. One of
upiter's storms is larger than Earth! It is called the Great Red Spot and may have been around
upiter's atmosphere for over
upiter has more than 60 moons. The two largest, Ganymede and Callisto, are bigger than the
lanet Mercury. Scientists believe that under its icy surface there maybe an
n which primitive sea life has developed.
JUPITER
JUPITER upiter is the In fact, it is so big that more than 1,300 Earths
upiter is the In fact, it is so big that more than 1,300 Earths
upiter is the In fact, it is so big that more than 1,300 Earths would fit inside it. Like the other gas giants, its outer layers are made of gases, with a small
upiter is the In fact, it is so big that more than 1,300 Earths would fit inside it. Like the other gas giants, its outer layers are made of gases, with a small ocky core at the centre. It seems incredible, but Jupiter's powerful gravity has dragged many
upiter is the In fact, it is so big that more than 1,300 Earths would fit inside it. Like the other gas giants, its outer layers are made of gases, with a small ocky core at the centre. It seems incredible, but Jupiter's powerful gravity has dragged many bassing objects towards it, becoming some of them the planet's moons.
upiter is the In fact, it is so big that more than 1,300 Earths would fit inside it. Like the other gas giants, its outer layers are made of gases, with a small ocky core at the centre. It seems incredible, but Jupiter's powerful gravity has dragged many bassing objects towards it, becoming some of them the planet's moons. upiter spins on its axis It spins faster than any other planet, so fast that
upiter is the In fact, it is so big that more than 1,300 Earths would fit inside it. Like the other gas giants, its outer layers are made of gases, with a small ocky core at the centre. It seems incredible, but Jupiter's powerful gravity has dragged many bassing objects towards it, becoming some of them the planet's moons. upiter spins on its axis It spins faster than any other planet, so fast that the clouds in its atmosphere are huge swirling storms with strong winds of up 500 km/h. One of
upiter is the
upiter is the In fact, it is so big that more than 1,300 Earths would fit inside it. Like the other gas giants, its outer layers are made of gases, with a small ocky core at the centre. It seems incredible, but Jupiter's powerful gravity has dragged many bassing objects towards it, becoming some of them the planet's moons. upiter spins on its axis It spins faster than any other planet, so fast that the clouds in its atmosphere are huge swirling storms with strong winds of up 500 km/h. One of upiter's storms is! It is called the Great Red Spot and may have been around upiter's atmosphere for over 350 years.

NAME:	DATE:	Worksheet 9H

JUPITER
Jupiter is the In fact, it is so big that more than 1,300 Earths
would fit inside it. Like the other gas giants, its $___$, with a small \blacksquare
rocky core at the centre. It seems incredible, but Jupiter's powerful gravity has dragged many
passing objects towards it, becoming some of them the planet's moons.
Jupiter spins on its axis once every ten hours. It spins faster than any other planet, so fast that
the clouds in its atmosphere are huge swirling storms with strong winds of up 500 km/h. One of
Jupiter's storms is! It is called the Great Red Spot and may have been around
Jupiter's atmosphere for over
Jupiter has more than 60 moons. The two largest, Ganymede and Callisto, are bigger than the
planet Mercury. Scientists believe that under its icy surface there maybe an ocean of warm, salty
water in which primitive sea life has developed.
CATUDN
SATURN
The second-largest planet in the Solar System, Saturn, is famous for its beautiful bright rings.
The second-largest planet in the Solar System, Saturn, is famous for its beautiful bright rings. Still known as the Ringed Planet, because its rings are the biggest, brightest and best, Saturn's
The second-largest planet in the Solar System, Saturn, is famous for its beautiful bright rings. Still known as the Ringed Planet, because its rings are the biggest, brightest and best, Saturn's rings look solid from a distance. But these are made of whirling
The second-largest planet in the Solar System, Saturn, is famous for its beautiful bright rings. Still known as the Ringed Planet, because its rings are the biggest, brightest and best, Saturn's
The second-largest planet in the Solar System, Saturn, is famous for its beautiful bright rings. Still known as the Ringed Planet, because its rings are the biggest, brightest and best, Saturn's rings look solid from a distance. But these are made of whirling
The second-largest planet in the Solar System, Saturn, is famous for its beautiful bright rings. Still known as the Ringed Planet, because its rings are the biggest, brightest and best, Saturn's rings look solid from a distance. But these are made of whirling around the planet. It must be said that Saturn is the least dense of all the planets, made up
The second-largest planet in the Solar System, Saturn, is famous for its beautiful bright rings. Still known as the Ringed Planet, because its rings are the biggest, brightest and best, Saturn's rings look solid from a distance. But these are made of whirling around the planet. It must be said that Saturn is the least dense of all the planets, made up basically of Saturn spins around so fast that we find very high winds, which can be even faster than the
The second-largest planet in the Solar System, Saturn, is famous for its beautiful bright rings. Still known as the Ringed Planet, because its rings are the biggest, brightest and best, Saturn's rings look solid from a distance. But these are made of whirling around the planet. It must be said that Saturn is the least dense of all the planets, made up basically of Saturn spins around so fast that we find very high winds, which can be even faster than the strongest hurricanes on Earth! Despite the fact that Saturn's atmosphere has a few violent
The second-largest planet in the Solar System, Saturn, is famous for its beautiful bright rings. Still known as the Ringed Planet, because its rings are the biggest, brightest and best, Saturn's rings look solid from a distance. But these are made of whirling around the planet. It must be said that Saturn is the least dense of all the planets, made up basically of Saturn spins around so fast that we find very high winds, which can be even faster than the strongest hurricanes on Earth! Despite the fact that Saturn's atmosphere has a few violent
The second-largest planet in the Solar System, Saturn, is famous for its beautiful bright rings. Still known as the Ringed Planet, because its rings are the biggest, brightest and best, Saturn's rings look solid from a distance. But these are made of whirling around the planet. It must be said that Saturn is the least dense of all the planets, made up basically of Saturn spins around so fast that we find very high winds, which can be even faster than the strongest hurricanes on Earth! Despite the fact that Saturn's atmosphere has a few violent clouds, it is much calmer than stormy Jupiter. Saturn takes nearly to orbit the
The second-largest planet in the Solar System, Saturn, is famous for its beautiful bright rings. Still known as the Ringed Planet, because its rings are the biggest, brightest and best, Saturn's rings look solid from a distance. But these are made of whirling around the planet. It must be said that Saturn is the least dense of all the planets, made up basically of Saturn spins around so fast that we find very high winds, which can be even faster than the strongest hurricanes on Earth! Despite the fact that Saturn's atmosphere has a few violent clouds, it is much calmer than stormy Jupiter. Saturn takes nearly to orbit the Sun and the length of a day is over 10 Earth hours.

NAME:	DATE:	Worksheet 9I

SATURN
The, Saturn, is famous for its beautiful bright rings.
Still known as the Ringed Planet, because its rings are the biggest, brightest and best, Saturn's
rings look solid from a distance. But these are made of millions of bits of ice and rock whirling
around the planet. It must be said that Saturn is the least dense of all the planets, made up
basically of
Saturn spins around so fast that we find, which can be even faster than the
strongest hurricanes on Earth! Despite the fact that Saturn's atmosphere has a few violent
clouds, it is much calmer than stormy Jupiter. Saturn takes nearly 29 Earth years to orbit the
Sun and the length of a day is over 10 Earth hours.
Around 60 large moons orbit Saturn. One of them, Titan, is a true giant. Bigger than the planet
Mercury, Titan is the only satellite in the Solar System that has its own atmosphere. With an icy
landscape, it may also have rivers and lakes made up of methane.
, , , , , , , , , , , , , , , , , , , ,
SATURN
SATURN The, Saturn, is famous for its beautiful bright rings.
SATURN The, Saturn, is famous for its beautiful bright rings. Still known as the Ringed Planet, because its rings are the biggest, brightest and best, Saturn's
SATURN The, Saturn, is famous for its beautiful bright rings.
SATURN The, Saturn, is famous for its beautiful bright rings. Still known as the Ringed Planet, because its rings are the biggest, brightest and best, Saturn's
SATURN The

NAME:	DATE:	Worksheet 9J

URAN	ius
After Jupiter and Saturn, this gas giant is the th	nird-largest planet in our Solar System. Uranus
was the first planet discovered through a telesco	ope and, despite it not being as big as Jupiter
and Saturn, it is still	Uranus is the seventh planet from the Sun and
it takes and 17 ho	urs to complete a day. It is a bright blue-green
planet and has a smooth-looking surface (like Jup	iter and Saturn, Uranus has no solid surface).
Unlike the other planets, Uranus spins on its s	ide, that's to say, at right-angles to the Sun.
Scientists think this occur because of a space coll	lision that could have almost destroyed it. They
think that a into	o Uranus and knocked it sideways.
Uranus's atmosphere is composed mainly of hyd	rogen and helium, with methane and traces of
water and ammonia. The planet has at least 21	moons (icy satellites), the biggest of which is
Titania, which are hardly perc	ceptible.
URAN	
After Juniter and Saturn, this gas giant is the	
After Jupiter and Saturn, this gas giant is the	in our Solar System. Uranus
After Jupiter and Saturn, this gas giant is the was the first planet discovered through a telesco	in our Solar System. Uranus ope and, despite it not being as big as Jupiter
After Jupiter and Saturn, this gas giant is the was the first planet discovered through a telescond and Saturn, it is still four times wider than Earth.	in our Solar System. Uranus ope and, despite it not being as big as Jupiter Uranus is the seventh planet from the Sun and
After Jupiter and Saturn, this gas giant is the was the first planet discovered through a telesco and Saturn, it is still four times wider than Earth. it takes and 17 hor	in our Solar System. Uranus ope and, despite it not being as big as Jupiter Uranus is the seventh planet from the Sun and urs to complete a day. It is a bright blue-green
After Jupiter and Saturn, this gas giant is the was the first planet discovered through a telescon and Saturn, it is still four times wider than Earth. it takes and 17 hour planet and has a smooth-looking surface (like Jup	in our Solar System. Uranus ope and, despite it not being as big as Jupiter Uranus is the seventh planet from the Sun and ours to complete a day. It is a bright blue-green oiter and Saturn, Uranus has no solid surface).
After Jupiter and Saturn, this gas giant is the was the first planet discovered through a telescon and Saturn, it is still four times wider than Earth. it takes and 17 hou planet and has a smooth-looking surface (like Jup Unlike the other planets,	in our Solar System. Uranus ope and, despite it not being as big as Jupiter Uranus is the seventh planet from the Sun and ours to complete a day. It is a bright blue-green ofter and Saturn, Uranus has no solid surface).
After Jupiter and Saturn, this gas giant is the was the first planet discovered through a telescon and Saturn, it is still four times wider than Earth. it takes and 17 how planet and has a smooth-looking surface (like Jup Unlike the other planets, Scientists think this occur because of a space collision.	in our Solar System. Uranus ope and, despite it not being as big as Jupiter Uranus is the seventh planet from the Sun and ours to complete a day. It is a bright blue-green ofter and Saturn, Uranus has no solid surface).
After Jupiter and Saturn, this gas giant is the was the first planet discovered through a telescon and Saturn, it is still four times wider than Earth. it takes and 17 how planet and has a smooth-looking surface (like Jupitulike the other planets, Scientists think this occur because of a space collist think that a giant asteroid may have crashed into	in our Solar System. Uranus ope and, despite it not being as big as Jupiter Uranus is the seventh planet from the Sun and ours to complete a day. It is a bright blue-green of the saturn, Uranus has no solid surface).
After Jupiter and Saturn, this gas giant is the was the first planet discovered through a telescon and Saturn, it is still four times wider than Earth. it takes and 17 how planet and has a smooth-looking surface (like Jupi Unlike the other planets, Scientists think this occur because of a space coll think that a giant asteroid may have crashed into Uranus's atmosphere is composed mainly of hydrogen and statement of the statemen	in our Solar System. Uranus ope and, despite it not being as big as Jupiter Uranus is the seventh planet from the Sun and ours to complete a day. It is a bright blue-green ofter and Saturn, Uranus has no solid surface).
After Jupiter and Saturn, this gas giant is the was the first planet discovered through a telescon and Saturn, it is still four times wider than Earth. it takes and 17 how planet and has a smooth-looking surface (like Jupitulike the other planets, Scientists think this occur because of a space collist think that a giant asteroid may have crashed into	in our Solar System. Uranus ope and, despite it not being as big as Jupiter Uranus is the seventh planet from the Sun and ours to complete a day. It is a bright blue-green ofter and Saturn, Uranus has no solid surface). , that's to say, at right-angles to the Sun. dision that could have almost destroyed it. They Uranus and knocked it sideways. Togen and helium, with methane and traces of moons (icy satellites), the biggest of which is

NAME:	DATE:	Worksheet 9K

URANUS
After Jupiter and Saturn, this gas giant is the in our Solar System. Uranus
was the first planet discovered through a telescope and, despite it not being as big as Jupiter
and Saturn, it is still Uranus is the seventh planet from the Sun and
it takes 84 years to complete one orbit and 17 hours to complete a day. It is a bright blue-green
planet and has a smooth-looking surface (like Jupiter and Saturn, Uranus has no solid surface).
Unlike the other planets,, that's to say, at right-angles to the Sun.
Scientists think this occur because of a space collision that could have almost destroyed it. They
think that a into Uranus and knocked it sideways.
Uranus's atmosphere is composed mainly of hydrogen and helium, with methane and traces of
water and ammonia. The planet has at least 21 moons (icy satellites), the biggest of which is
Titania. It also has 11 rings, which are hardly perceptible.
NEDTUNE
NEPTUNE
Neptune, the smallest of the gas giants, can only be seen from Earth using a telescope or
Neptune, the smallest of the gas giants, can only be seen from Earth using a telescope or powerful binoculars. In fact, it is the Neptune orbits the
Neptune, the smallest of the gas giants, can only be seen from Earth using a telescope or powerful binoculars. In fact, it is the Neptune orbits the Sun once every 165 years. In other words: its orbit is 30 times further from the Sun than
Neptune, the smallest of the gas giants, can only be seen from Earth using a telescope or powerful binoculars. In fact, it is the
Neptune, the smallest of the gas giants, can only be seen from Earth using a telescope or powerful binoculars. In fact, it is the
Neptune, the smallest of the gas giants, can only be seen from Earth using a telescope or powerful binoculars. In fact, it is the
Neptune, the smallest of the gas giants, can only be seen from Earth using a telescope or powerful binoculars. In fact, it is the
Neptune, the smallest of the gas giants, can only be seen from Earth using a telescope or powerful binoculars. In fact, it is the
Neptune, the smallest of the gas giants, can only be seen from Earth using a telescope or powerful binoculars. In fact, it is the
Neptune, the smallest of the gas giants, can only be seen from Earth using a telescope or powerful binoculars. In fact, it is the
Neptune, the smallest of the gas giants, can only be seen from Earth using a telescope or powerful binoculars. In fact, it is the

NAME:	DATE:	Worksheet 9L

NEPTUNE
Neptune,, can only be seen from Earth using a telescope or
powerful binoculars. In fact, it is the most distant planet in our Solar System. Neptune orbits the
Sun once every 165 years. In other words: its orbit is 30 times further from the Sun than
Earth's. An example of this: on 29 May 2011 Neptune will have made just the
Sun since its discovery in 1846.
Like Uranus, it is an But a lot of activity takes place there. Heat from
within Neptune's core creates fast winds and colossal storms. The storms look like dark spots on
the planets' surface and the winds are considered to be the strongest in the Solar System.
is caused by the methane in its atmosphere, a molecule that absorbs red
light. This gas giant is orbited by eight moons and five thin complete rings and one partial ring.
Neptune's biggest moon, Triton, is a frozen icy world, with active icy volcanoes that expel
nitrogen gas.
NEPTUNE
Neptune,, can only be seen from Earth using a telescope or
Neptune,, can only be seen from Earth using a telescope or powerful binoculars. In fact, it is the Neptune orbits the
Neptune,, can only be seen from Earth using a telescope or powerful binoculars. In fact, it is the Neptune orbits the Sun once every 165 years. In other words: its orbit is 30 times further from the Sun than
Neptune,, can only be seen from Earth using a telescope or powerful binoculars. In fact, it is the Neptune orbits the Sun once every 165 years. In other words: its orbit is 30 times further from the Sun than Earth's. An example of this: on 29 May 2011 Neptune will have made just one circuit around the Sun since its discovery in 1846.
Neptune,

NAME:	DATE:	Worksheet 10

4 Read these questions carefully and ask a partner from each group to get the information needed. Use the box below to remember the planets.

Uranus	Mars	Venus	Saturn
Jupiter	Mercury	Neptune	Earth

QUESTION	ANSWER	PLANET
1. Is your planet a gas giant or a small rocky one?		
2. Has your planet got any moons? How many?		
3. How long is a day on your planet?		
4. Has your planet got any rings? How many?		
5. How far is your planet from the Sun?		
6. Is your planet cold or hot?		
7. Do you think life can exist on your planet? Why? Why not?		
8. Say any interesting fact about your planet.		

NAME:	DATE:	Worksheet 11

♣ Read the questions from the wall papers and write your answers in the grid below:

QUESTION	ANSWER	QUESTION	ANSWER
Α		N	
В		0	
С		Р	
D		Q	
E		R	
F		S	
G		Т	
Н		U	
I		V	
J		W	
K		X	
L		Υ	
М			

NAME:	DATE:	Worksheet 12

4 Use the results from *Worksheet 11* to complete these mathematical operations.

	MATHEMATICAL OPERATION	RESULT
1	A MULTIPLIED BY F	
2	S MINUS B	
3	C PLUS H	
4	U DIVIDED BY D	
5	J PLUS G	
6	I MULTIPLIED BY K	
7	M MINUS L	
8	Y MINUS X	
9	O PLUS V	
10	R DIVIDED BY T	
11	Q MULTIPLIED BY P	
12	V DIVIDED BY W	
13	E MULTIPLIED BY N	

NAME:	DATE:	Worksheet 13A

A STAR IS A HUGE BALL OF GAS
MADE UP MAINLY OF HYDROGEN. IT
HAS A TEMPERATURE OF TENS OF
MILLIONS OF DEGREES. THE ENERGY
PRODUCED BY FUSION IS EMITTED
AS LIGHT AND HEAT. WE CAN
DIFFERENTIATE STARS BY THEIR
PROPERTIES: TEMPERATURE OR
COLOUR, SIZE AND LUMINOSITY.

COMETS ARE SMALL CELESTIAL
BODIES MADE OF ICE, DUST AND
GASES THAT ORBIT AROUND THE
SUN IN ELLIPSES. THEY USUALLY
HAVE GOT A BRIGHT TAIL WHICH IS
ONLY VISIBLE AS THEY ARE NEAR
THE SUN. THE TAIL CAN BE UP TO
250 MILLION KM LONG AND IS
MOST OF WHAT WE SEE.

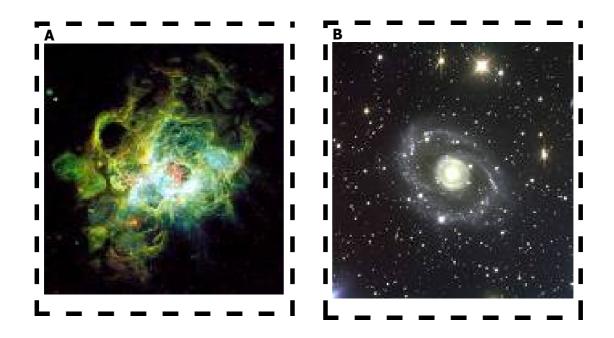
NAME: DATE: Worksheet 13B

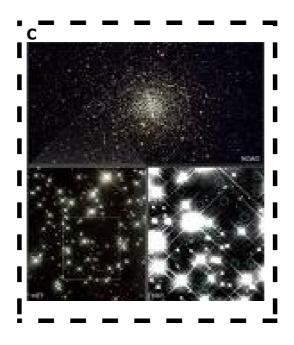
ASTEROIDS ARE ROCKY OR METALLIC OBJECTS, MOST OF WHICH ORBIT THE SUN IN THE ASTEROID BELT BETWEEN JUPITER AND MARS. THERE ARE THOUSANDS ASTEROIDS IN THE SOLAR SYSTEM AND NONE OF THEM HAVE GOT. ATMOSPHERES. GALAXIES ARE ENORMOUS GROUPS OF STARS, GASES AND DUST. THE MATTER IN A GALAXY IS HELD TOGETHER BY THE FORCE OF GRAVITY. GALAXIES ARE DIVIDED INTO THREE MAIN **TYPES, ■** ACCORDING TO THEIR SHAPE: SPIRAL, ELLIPTICAL OR IRREGULAR.

NAME:	DATE:	Worksheet 13C

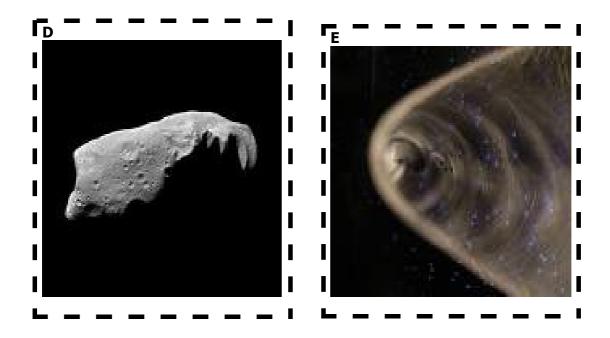
CONSTELLATIONS ARE IMAGINARY PATTERNS OF STARS GROUPED TOGETHER. THEY ADOPT DIFFERENT FORMS ACCORDING TO **SHAPE. MANY CONSTELLATIONS ARE** NAMED AFTER CHARACTERS IN ANCIENT MYTHOLOGY. THEY LOOK _ LIKE OBJECTS, PEOPLE OR ANIMALS AND THEY CAN ONLY BE SEEN AT NIGHT. NEBULAE ARE MASSIVE CLOUDS OF GASES AND DUST FLOATING IN SPACE. THESE CLOUDS ARE MADE UP **MAINLY OF HELIUM AND HYDROGEN** AND THEY REFLECT THE LIGHT **EMITTED BY THE STARS AROUND** THEM. IT IS INTENSIVELY COLD INSIDE A BIG NEBULA, ONLY 100 ABOVE ZERO.

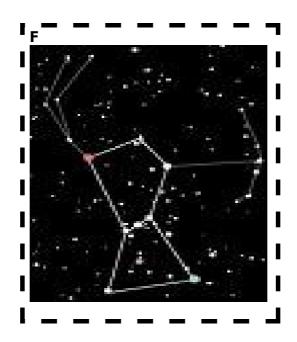
NAME: DATE: Worksheet 14A





NAME: DATE: Worksheet 14B





NAME:	DATE:	Worksheet 15

♣ Read the questions below and decide *'Yes'* or *'No'*. If you answer *'Yes'*, write the corresponding name helping you from the box provided.

CONSTELLATIONS	GALAXIES	NEBULAE	
ASTEROIDS	STARS	COMETS	

1	CAN WE DIFFERENCIATE THEM BY TEMPERATURE, COLOUR, SIZE AND LUMINOSITY?	YES NO	Go to question 2
2	ARE THEY ROCKY OR METALLIC OBJECTS?	YES NO	Go to question 3
3	ARE THEY CLOUDS MADE UP OF HELIUM AND HYDROGEN?	YES NO	Go to question 4
4	DO THEY LOOK LIKE OBJECTS, PEOPLE OR ANIMALS?	YES NO	Go to question 5
5	ARE SPIRAL, ELLIPTICAL AND IRREGULAR SOME OF THEIR SHAPES?	YES NO	Go to question 6
6	ARE THEY SMALL CELESTIAL BODIES MADE OF ICE, DUST AND GASES?	YES	

NAME: DATE: Worksheet 16

♣ Take a look at these pictures and tell a partner when you have used the materials shown:



















NAME:	DATE:	Worksheet 17A

4 Read the sentences from the squares below and make your choice.

1. THERE ARE 8 IN THE SOLAR SYSTEM	2. THE NAME OF THE EARTH'S SATELLITE IS	3. MARS IS ALSO CALLED THE	4. THE UNIVERSE WAS CREATED AFTER THE
5. OUR HOME GALAXY IS CALLED THE	6. THE BIGGEST PLANET IN THE SOLAR SYSTEM IS	7ARE ENORMOUS GROUPS OF STARS, GASES AND DUST	8. THIS STAR GIVES NAME TO OUR SOLAR SYSTEM
9. JUPITER, SATURN, URANUS AND NEPTUNE ARE KNOWN AS THEGIANTS	10. THIS PLANET IS FAMOUS FOR ITS BEAUTIFUL AND HUGE RINGS	11. THE BIG BANG HAPPENED MILLION YEARS AGO	12. MERCURY, VENUS, EARTH AND MARS ARE THEPLANETS
13. A DAY IN THE EARTH IS HOURS	14. THE NEAREST PLANET TO THE SUN IS	15. SPHERICAL BODIES THAT ORBIT THE SUN	16. THE ONLY PLANET WHERE LIFE EXISTS ON
17ARE SMALL CELESTIAL BODIES MADE OF ICE, DUST AND GASES	18. THEIS EXPANDING BUT NOT GALAXIES	19. THE FARTHEST PLANET TO THE SUN IS	20. THIS PLANET IS ALSO CALLED THE BLUE PLANET
21 ARE ROCKY OR METALLIC OBJECTS	22. AIS A HUGE BALL OF GAS MADE UP MAINLY OF HYDROGEN	23. A YEAR IN THE EARTH ISDAYS	24. THE SMALLEST PLANET IN THE SOLAR SYSTEM IS

NAME:	DATE:	Worksheet 17B

Write your answers in the blanks below:

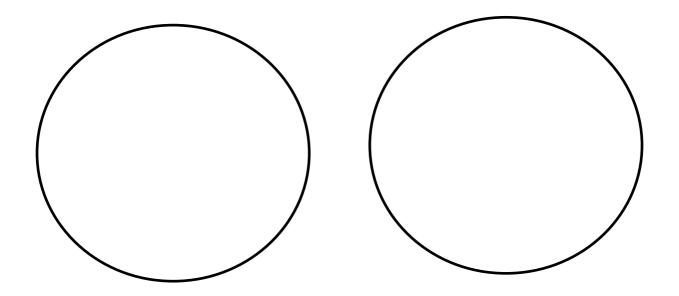
1.	2.	3.	4.
5.	6.	7.	8.
9.	10.	11.	12.
13.	14.	15.	16.
17.	18.	19.	20.
21.	22.	23.	24.

NAME:	DATE:	Worksheet 18A

TESTING WHAT YOU KNOW

1. Classify the planets into two groups:

JUPITER	EARTH	VENUS	MARS
NEPTUNE	SATURN	URANUS	MERCURY



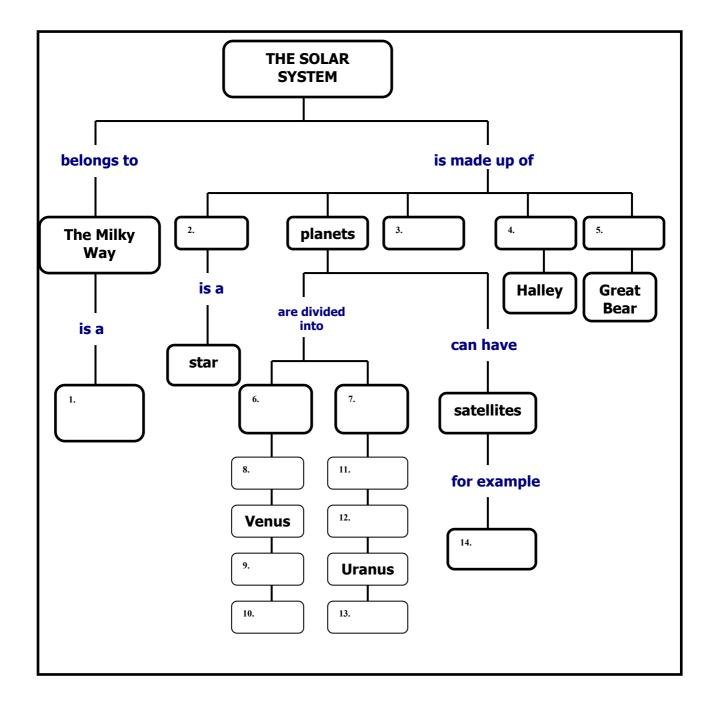
❖ Which criterion did you use? ______

2. Complete the sentences.

- There are 8 planets in the ______ and the main star is the ______.
- are enormous groups of stars, gases and dust.
- Our _____ is called the Milky Way.
- The Moon is the Earth's _____.

NAME:	DATE:	Worksheet 18B

3. Complete the word map.



IAME:	DATE:	Worksheet 18C
Read A and B a	nd complete the information a	sked:
1. Draw a plane	which is a gas giant.	
2. Write down th	ne names of the other gas giants.	
3. What is the d	fference between a gas giant and planet?	
	which is a small rocky one.	
	ne names of the other small rocky	
planets.		

3. What is the difference between Mars and Neptune?

NAME:	DATE:	Worksheet 19A

♣ The time a planet spends in orbiting the Sun varies according to the distance they are from the Sun. For this reason, a "year" on each planet is a different amount of time. How old were you on each planet? To get your "age", follow the instructions below and then look at the chart provided:

Instructions to follow

- > **Multiply** your age **by 365** (which are the days of a year on Earth)
- > **Divide** the result **by** the **days** of a year of each planet.
- > Look at the example: a woman is **35** and she wants to know how old on **Mercury** is. If a year on Mercury is **87** days, then:
 - 1. $35 \times 365 = 12775$
 - 2. **12775 : 87 = 146** years old

The planets and its years

Planet	YEAR
Mercury	87 Earth days
Venus	224 Earth days
Earth	365Earth days
Mars	686 Earth days
Jupiter	11 Earth years
Saturn	29 Earth years
Uranus	84 Earth years
Neptune	164 Earth years

NAME:	DATE:	Worksheet 19B

♣ Use the substitution table below to complete the exercise. Look at the example to help you.

ON	MERCURY VENUS EARTH MARS JUPITER SATURN URANUS NEPTUNE	I YOU HE SHE IT WE YOU THEY	AM IS ARE	YEARS OLD.
----	--	-----------------------------	-----------------	------------

•	On	MERCL	JRY I	am	50	years	old.
---	----	--------------	-------	----	----	-------	------

NAME:	Wo	Worksheet 20							
♣ STUDENT'S SELF-ASSESSMENT FORM (UNITS 1 and 2)									
Subject:									
□ What I liked doing most:									
□ What I didn't like or found diff	ficult:								
How I worked:									
•	of the teacher								
In the group:									
		sion.							
WWW.T.T. CAN DO OD WW.AT.									
WHAT I CAN DO OR WHAT I	[KNOW 😊	(2)	<u> </u>						