

School Closure Work Year 7 & 8 Science

Name:

Science Teacher:



This week we would like you to learn about and research some facts about our solar system. There are three different tasks for you to do to help you learn about the Solar System and then a final task of an extended project. This should be the equivalent to at least of 1 weeks worth of work in your science lessons (4 hours) but you can spend more time on it if required.

Task 1 - Space Anagrams

Have a go at solving the anagrams for different objects from the Solar System

- raeht
- raunts
- bolstered air
- remote tie
- punteen
- rumcrey
- latest lie
- pri jute

Task 2 - Wordsearch for Space, the solar system and planets

T	E	M	O	C	N	O	S	H	T	R	A	E	S
O	R	T	E	Y	A	P	R	P	O	S	T	E	I
S	U	N	E	T	I	L	L	E	T	A	S	C	X
Y	O	A	I	N	S	A	D	R	T	R	N	S	A
A	R	B	N	G	N	Y	O	T	E	I	U	A	H
D	R	I	S	E	R	N	S	V	H	N	P	T	A
O	N	R	T	U	O	A	I	R	E	G	N	U	D
G	A	D	C	M	S	N	V	V	A	O	I	R	J
M	D	R	E	D	U	K	N	I	M	L	T	N	E
S	E	R	E	L	O	P	Y	L	T	N	O	O	M
M	R	A	T	S	G	A	L	A	X	Y	M	S	A

GALAXY

VENUS

UNIVERSE

MERCURY

MARS

SOLAR SYSTEM

YEAR

JUPITER

ASTRONOMER

POLE

SATURN

NIGHT

SATELLITE

PLANET

MONTH

MOON

ORBIT

SPINNING

EARTH

COMET

AXIS

DAY

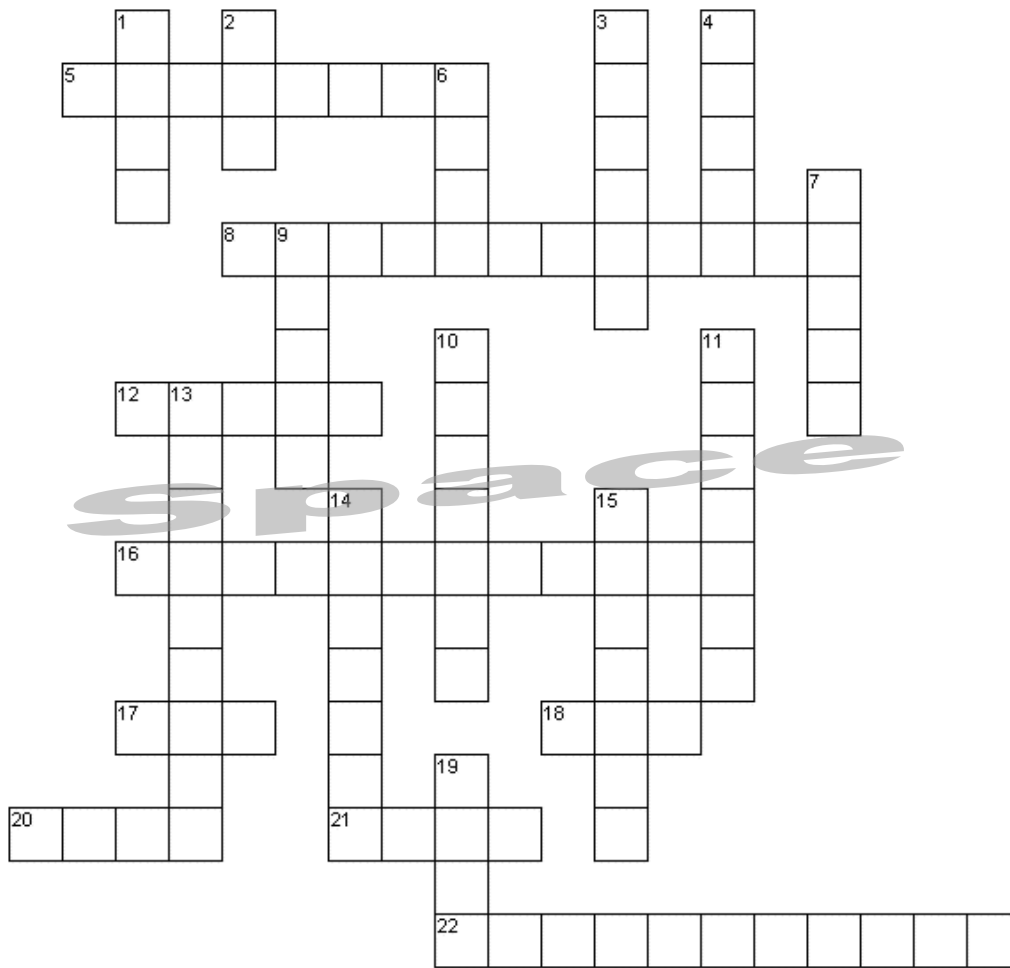
GRAVITY

SKY

SUN

STAR

Task 3 - Space Crossword



Across

- 5. A planet completes one of these every day
- 8. Vehicle to transport people into space
- 12. Our planet
- 16. This is found in between Mars and Jupiter
- 17. The first animal in space was one of these
- 18. This star gives us light
- 20. This was left on the moon
- 21. The time it takes for a planet to complete an orbit
- 22. The group of planets and star that Earth is part of

Down

- 1. A natural satellite
- 2. Some planets are made of rock and some are made of ...
- 3. One of the gases that is found in the Sun
- 4. The path of a planet around a star
- 6. The number of planets that have been discovered in our Solar System
- 7. The hottest planet in the Solar System
- 9. No longer a planet
- 10. The nationality of the first man in space
- 11. Largest planet in the Solar System
- 13. Neil The first man to walk on the moon
- 14. This force is very attractive
- 15. Planet closest to the Sun
- 19. The red planet

Task 4 - Planetary information table

If you have access to the internet or any books about space try to complete the missing information in the Solar System Planetary Information Table below. And use this to write a planet fact file.

Planet	Average distance from the Sun, (millions of kilometres).	Number of moons	Surface temperature (°C)	Force of gravity on 1kg on the surface of the planet. (newtons)	Orbit around the Sun	Time to spin once (hours)
Mercury						
Venus						
Earth		1	-80 to 50	10	365.25 Earth days	24
Mars						
Jupiter						
Saturn						
Uranus						
Neptune						

These websites could be useful for your research:

<https://www.planetsforkids.org/>

<https://space-facts.com/planets/>

<https://nineplanets.org/kids/>

<http://learn.arc.nasa.gov/planets/>

Task 5 - Solar System project

Choose ONE of the following projects to explore the solar system and space further, if you do not have any access to the internet then you should pick options 1 to 5:

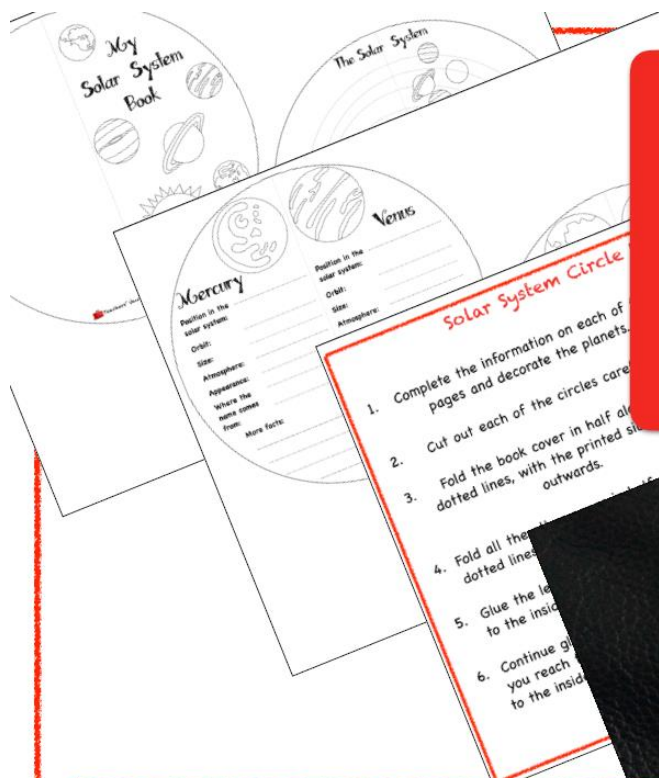
1. Make a 'Planet Circle Book' using the template (see appendix 2)
2. Make a model solar system
3. Make a painting of the solar system
4. Produce a visitor's guide to our solar system for an Alien Intergalactic Tour Agents who want a guide for our galaxy and we would like your advice about the sites to visit in your Solar system.
 - Present it on an A4 sheet of paper or as a booklet.
 - Include maps or pictures.
 - Tell your visitors about things to look out for as they travel through the Solar system.
 - Tourists often like to know about the climate to expect on holiday.
5. Write a piece of creative writing. Imagine you are an astronaut and have visited a planet of your choice. Describe your journey and what conditions you found when you landed.
6. If you were able to complete the planetary information table you could use the make a set of planet fact files (see appendix 1) for the planets in the Solar System
7. Research one of NASA space craft e.g. Voyager. Prepare a power point presentation to explain the journey it made and what information it found out about the solar system. A list of all NASA missions in our Solar System can be found here:
<https://www.nasa.gov/content/solar-missions-list>
8. Make a timeline of humanity's exploration of the moon
<https://www.space.com/12841-moon-exploration-lunar-mission-timeline.html>
<https://nssdc.gsfc.nasa.gov/planetary/lunar/lunartimeline.html>

Apendix 1
Planet fact file

Planet:	
My planet is	miles from the sun
A day for my planet is	hours
A year for my planet is	days
The planets diameter is	meters
My planet is	rocky / gaseous <i>(circle correct answer)</i>
My planet	does / does not have an atmosphere
My planet	does / does not have rings
My planet has	moons
There names are,	
2 more facts about my planet are	
1.	
2.	
Draw a diagram of your planet and colour it in	

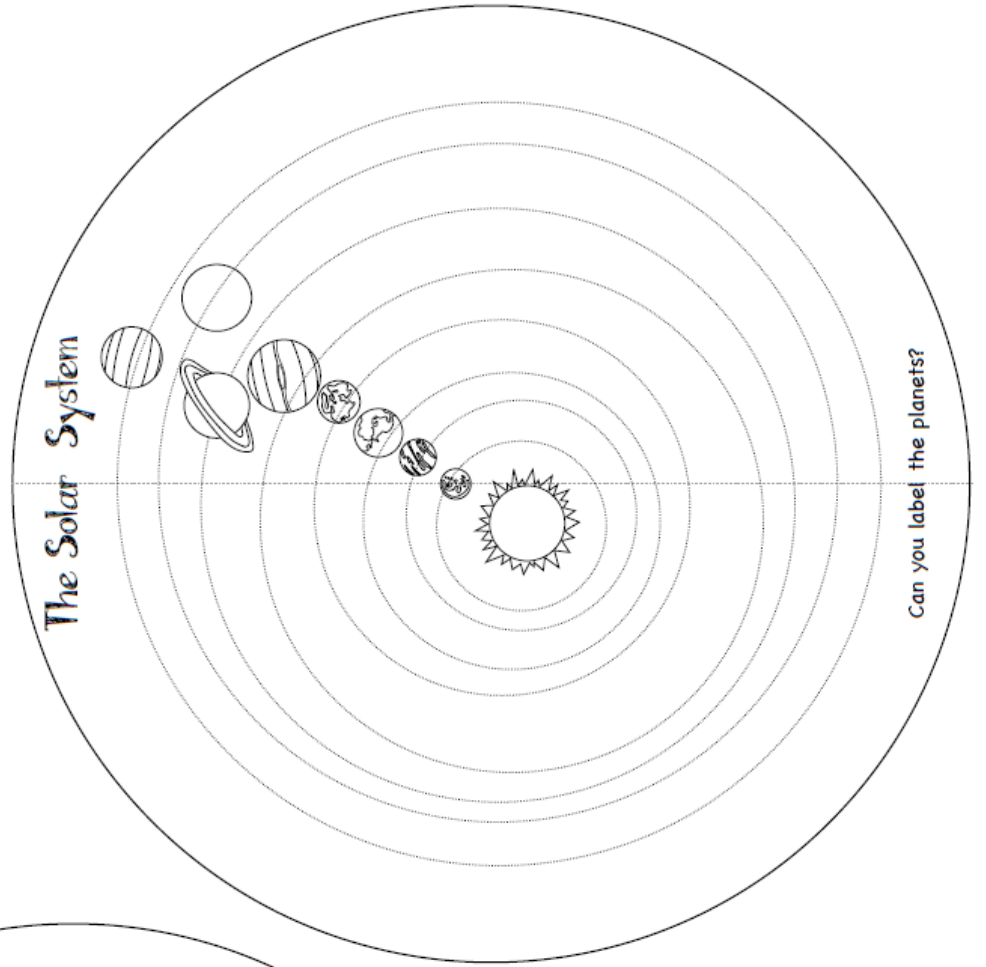
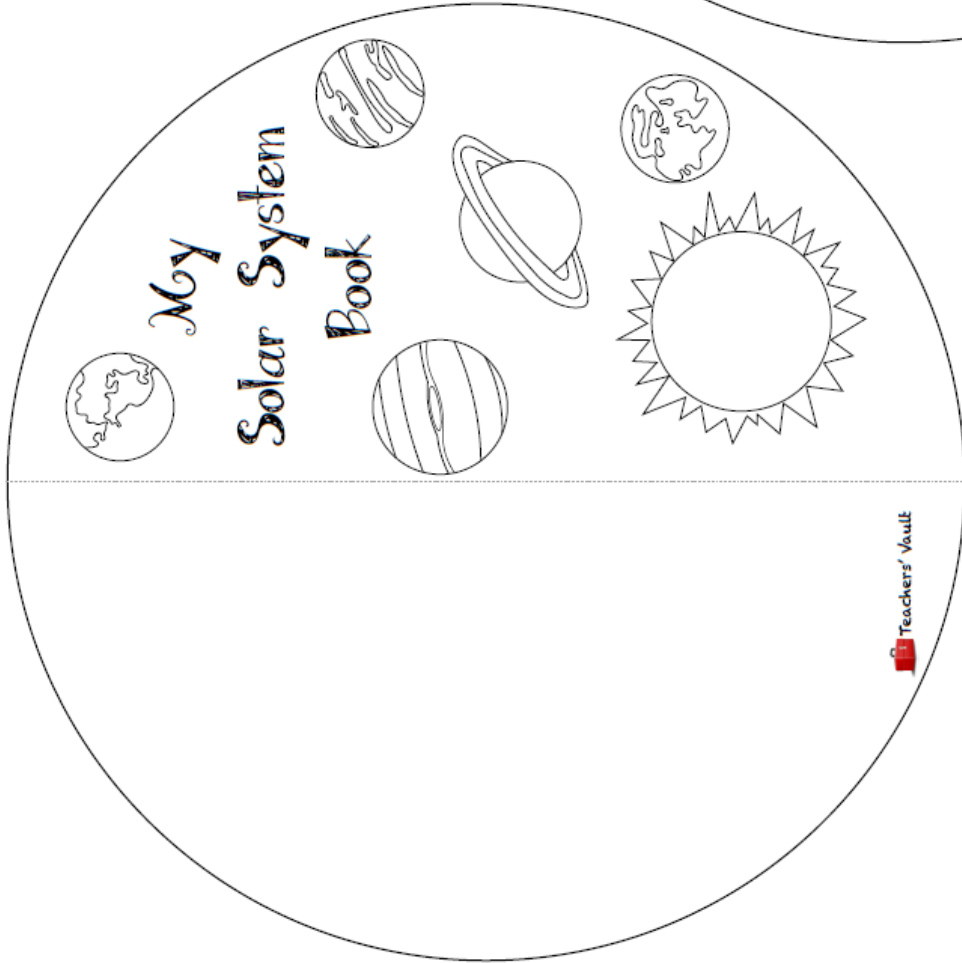
Appendix 2

Solar System Circle Book
An engaging research project to learn more about the planets of our solar system. Complete the information and decorate your pages before following the instructions to create a circular book.



Instructions

1. Complete the information on each of the pages and decorate the planets.
2. Cut out each of the circles carefully.
3. Fold the book cover in half along the dotted lines, with the printed side facing outwards.
4. Fold all the other pages in half along the dotted lines with the printed sides inside.
5. Glue the left hand side of the first page to the inside left side of the front cover.
6. Continue gluing half pages together until you reach the last half. This is to be glue to the inside right half of the front cover.



Mercury



Position in the solar system:

Orbit:

Size:

Atmosphere:

Appearance:

Where the name comes from:

More facts:

Venus



Position in the solar system:

Orbit:

Size:

Atmosphere:

Appearance:

Where the name comes from:

More facts:

Earth



Position in the solar system:

Orbit:

Size:

Atmosphere:

Appearance:

Where the name comes from:

More facts:

Mars



Position in the solar system:

Orbit:

Size:

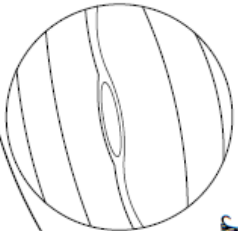
Atmosphere:

Appearance:

Where the name comes from:

More facts:

Jupiter



Position in the solar system:

Orbit:

Size:

Atmosphere:

Appearance:

Where the name comes from:

More facts:

Saturn



Position in the solar system:

Orbit:

Size:

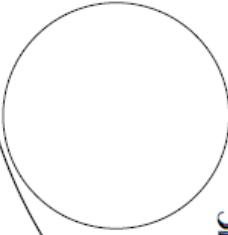
Atmosphere:

Appearance:

Where the name comes from:

More facts:

Uranus



Position in the solar system:

Orbit:

Size:

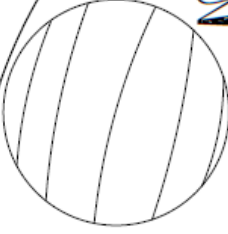
Atmosphere:

Appearance:

Where the name comes from:

More facts:

Neptune



Position in the solar system:

Orbit:

Size:

Atmosphere:

Appearance:

Where the name comes from:

More facts: