SCIENCE CAMPS

Summer Science Family Activity Book

2020, Edition 2

Families with Kids in Grades K-3

UNIVERSITY OF SASKATCHEWAN
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Planet Names

Can you name all 8 planets in the solar system? Hint: use the letters to help!

RSNUAT _____

TAHER _____

SRUNAU _____

CMREYUR _____

TENNUPE _____

NEVSU _____

PRUJIET _____

SRAM _____

Further Learning

Can you name the moons of Uranus and Neptune? Hint: use the letters to help!

EILAR _____

PUIDC _____

KCUP _____

LIETUJ _____

TONTRI _____

Design Your Own Spacesuit

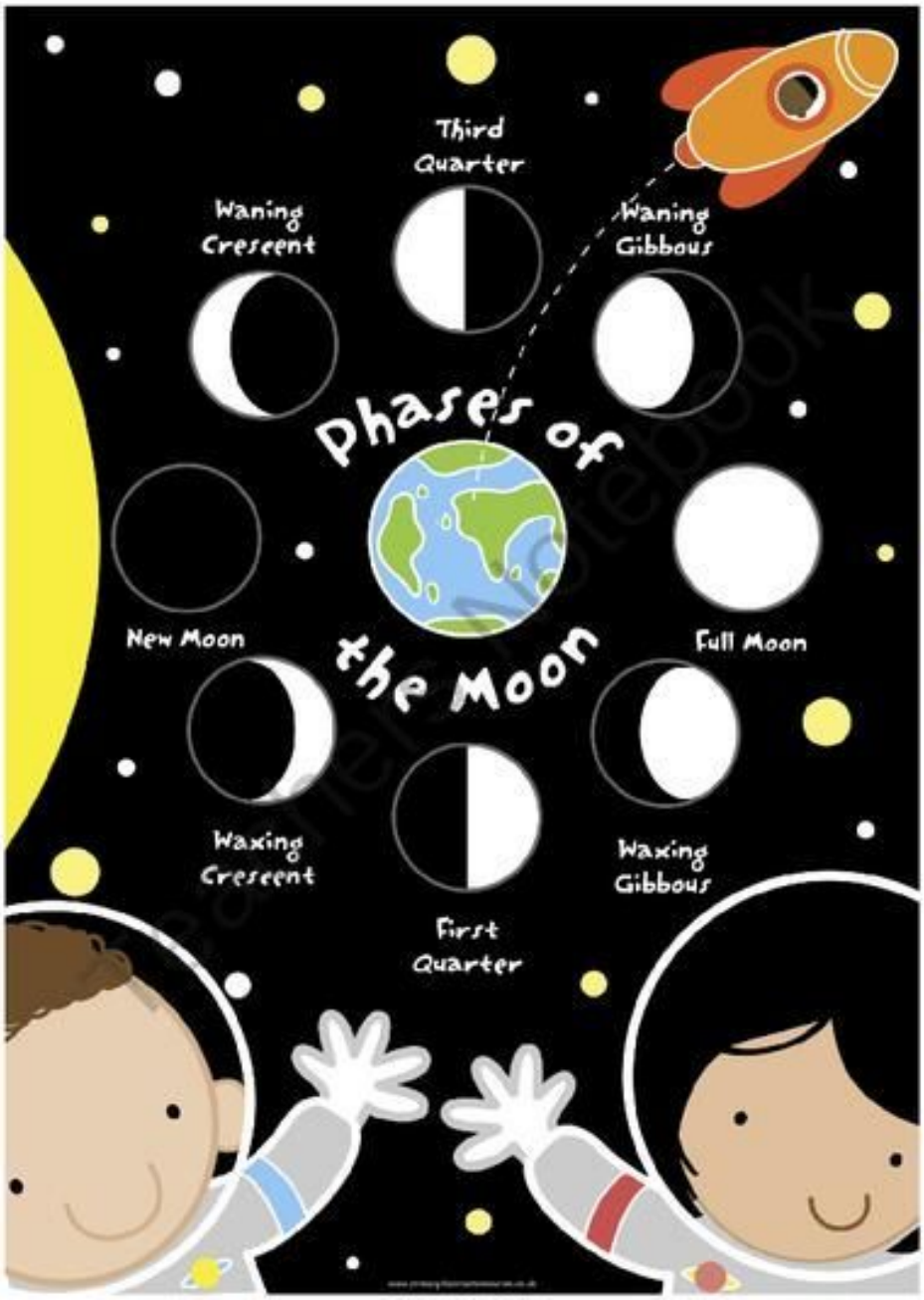
What if you went to the moon on a spaceship? What would your spacesuit look like? What tools would you have? Draw a picture of your spacesuit below!

Further Learning

Want to learn more about spacesuits and can go to the internet? Check out “Why do Astronauts Wear Spacesuits?” at www.youtube.com/watch?v=jP4SKI9I4w4&t=68s.

My Moon Journal:

Activity: The moon is always changing! The moon spins around us on the earth… The different looks of the moon are **moon phases!!**



Activity: My Moon Journal

- Each night go out and look at the moon.
- Draw how you see the moon in the blank spots
- Try to match the drawing to one of the moon phases!

Example:

Date: July 24

Waning Crescent

Date Started Moon Journal:_____

Date:	Date:	Date:	Date:	Date:	Date:	Date:
Date:	Date:	Date:	Date:	Date:	Date:	Date:
Date:	Date:	Date:	Date:	Date:	Date:	Date:
Date:	Date:	Date:	Date:	Date:	Date:	Date:

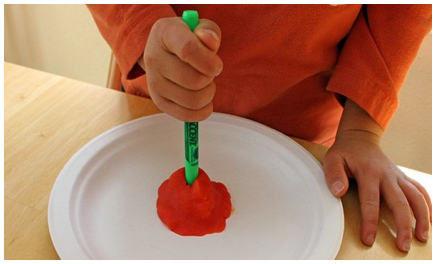
Recording the Earth's Rotation through Shadow

Did you know that Earth moves in two different ways**?!** It moves around the sun and it spins**!** The earth's movement around the sun is called a **REVOLUTION**. It takes a little over 365 days, or one year, for the earth to make one full revolution around the sun**!** At the same time, the earth spins on its **AXIS** (an axis is like an imaginary line form that goes through the center of the earth from the top to the bottom, the north pole and the south pole). The spinning of the earth is called **ROTATION**. Earth's rotation on its axis is what creates day and night. It takes the earth about 24 hours, or one day, to make one complete rotation**!** So it may look like the sun is moving across our sky, but this is only an illusion created by the rotation of the Earth. Thousands of years ago, people used a device called a sundial to tell time by tracking the sun across the sky and the shadows it formed.

Activity: We are going to record Earth's rotation through shadow by making our own mini sundial.

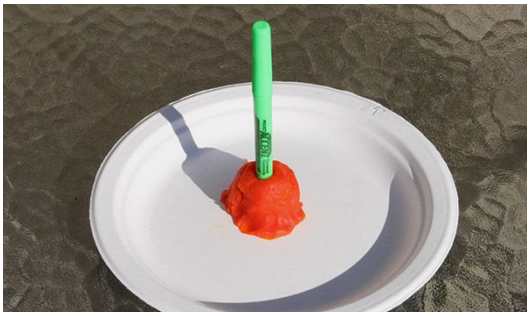
What you will need:
- a paper plate or this paper
- a pen or pencil (or anything that will stand up straight)
- play dough or tape (or anything to keep to attach the the pen or pencil to the plate)
- a sunny day to conduct this experiment!

What you do:
1. Attach the pencil/pen to the center of the paper plate using the playdough or tape.

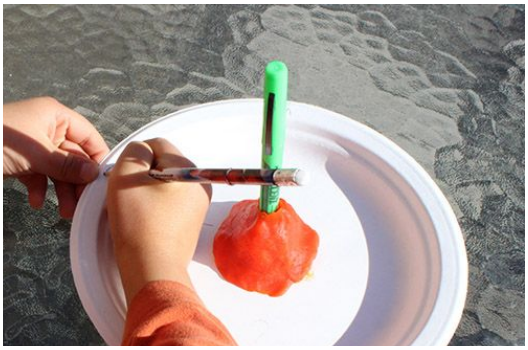


2. Mark **N** for north at the top of the plate.

3. Set your paper plate outside in a sunny area and with the help of a parent, use a compass to make sure ‘N’ faces north.



4. Make your first observation at 9 AM. Draw a line through the shadow of the pencil/pen/straw and label the time at the end of the line.



5. Continue to record your observations every hour until the sun sets. You may need to move your plate to make sure it stays in a sunny area.

Further Learning: Do you notice a pattern with your observations? Did you cover the whole plate? Why or why not?

Cree Star Stories & Crossword

Long before Europeans crossed the Atlantic Ocean and colonized North America the Indigenous peoples had many stories explaining the constellations they saw in the sky. These constellation stories were often rooted in their connection to nature and the world around them.

The Fisher Stars - Ochek Atchakosuk

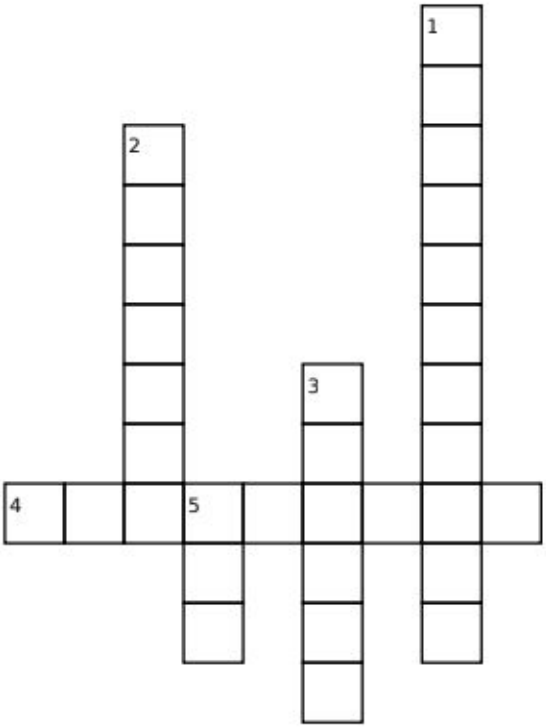
“The Big Dipper is the Fisher Stars in Cree legends from Northern Manitoba. (The fisher is a small relative of the wolverine.) This legend tells us how summer was brought to the north. Long ago there was no summer in northern Manitoba. Certain animals were selected to bring summer to the north. The Ochek, the fisher, was given this task and in honor of this, the Creator placed the fisher in the sky.” This story is from Jane Houston Jones - “First Nations Astronomy - seeing the Cree and Ojibway Sky”

Connect the dots and guess which constellation this is!

HINT: small relative of the wolverine

The Dog Star - Atima Atchakosuk

“In Cree the Little Dipper is called The Dog Star, Atima Atchakosuk, and the North Star is called the Wolf Star. Long ago the people had no dogs to protect them. Their relatives the wolf, coyote, and fox saw this. The wolves held a council and decided that two of them would go to live with the people, as did the coyote’s and foxes’ councils. Two pups from each council were also sent to all the four directions of humankind. From these four came all the dogs in the world, and now they guard our homes and camps. To honor this sacrifice the Creator placed a reminder in the heavens. The North Star anchors the leash as the dogs run around their sky camp. The three stars of the little dipper handle represent the wolf , coyote, and fox. The four bowl stars represent the pups sent to the four directions of humankind.”



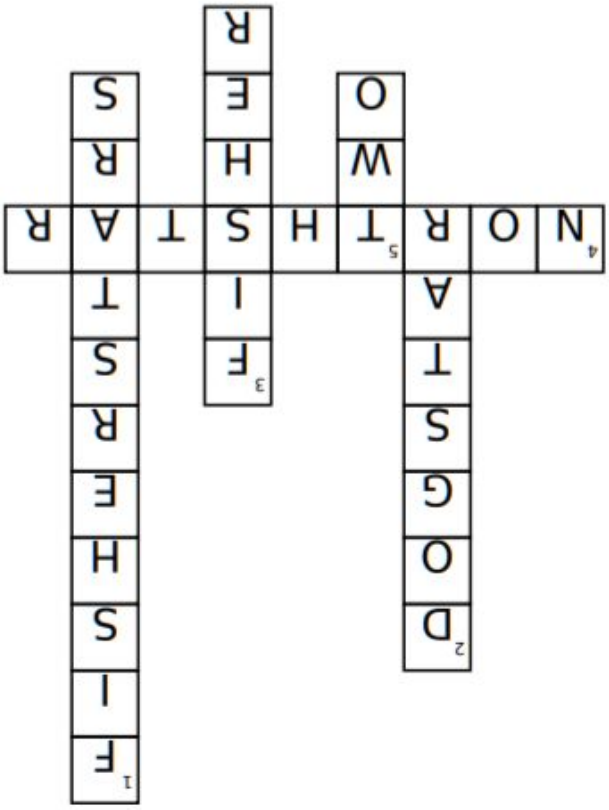
Down:

1. The Cree legend of the big dipper
2. Cree constellation for little dipper
3. Brought summer to the north
5. Number of pups sent from each council

Across:

4. anchors the leash of the dogs in the sky camp

Crossword Answers:



Comets

R O R B I T P D Z M A M P K P T R D O E

R A S T R O N O M E R M E Y E P R S D A

F O T G O Z O F Y T I F E M T A K I Z A

D I E S R E P N X S S Z O T C H O O S Z

C T B T G A N B A Y T C U M E R R T H A

W F T A E N G K L S O M G M O O E Y M N

A T D P W M I C A R T P V E T R R C T I

R E E B L D R T G A L Q T U O F Q I R K

L X G P I A T V O L E E U I J U F V T O

J W O H M Q E C M O M S D Y W E Z M P E

B E N Y V R Z Y X S H I I A Q S D H F G

X Z J E D K Y F T R Z S U N H R J Z K B

ARISTOTLE
COMET
METEORITE
PERSEID

ASTEROID
GALAXY
METEOROIDE
SHOOTINGSTAR

ASTRONOMER
METEOR
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