COMPASS BY VAVY · FREE PRINTABLE · AGES 6–8

Space Mission Scavenger Hunt

40 chits that travel from the Sun out to the edge of the universe. Each one teaches a space fact, then gives a tough clue: riddles, scrambled words, missing letters, backwards words and secret number codes.

Step 1
Print the chits and cut along the dashed lines. Fold each one in half so the clue is hidden.

Step 2
Hide chits 2 to 40 where the tiny note at the bottom of each chit says. The prize goes under the bed.

Step 3
Hand chit 1 to your astronaut. Each clue leads to the spot where the next card is hiding.

Step 4
Cut out the Decoder Card below and give it to your astronaut with chit 1. Plan on 60 to 90 minutes, or do one or two stages a day.

Find more family activities at **compassbyvavy.ca**

No toque or board game in the house? Swap the spot: just rewrite that chit's clue and the hiding note on the chit before it.

ASTRONAUT DECODER CARD

A	B	C	D	E	F	G	H	I	J	K	L	M
1	2	3	4	5	6	7	8	9	10	11	12	13
N	**O**	**P**	**Q**	**R**	**S**	**T**	**U**	**V**	**W**	**X**	**Y**	**Z**
14	15	16	17	18	19	20	21	22	23	24	25	26

Stage 1

The Sun, Mercury & Venus

Chits 1–8

MISSION CONTROL #1

Did you know? The Sun is a star. It is so big that more than a million Earths could fit inside it!

Riddle: I hum all day and night. When you open me, a little light turns on. Inside it's always winter, the opposite of the Sun. What am I?

> Count down from 10 and BLAST OFF!

Hand to your astronaut to start

MISSION CONTROL #2

Did you know? Sunlight takes about 8 minutes to travel all the way from the Sun to Earth.

Unscramble these letters: P - M - L - A. It shines like a tiny Sun in our house.

Hide in: the fridge

MISSION CONTROL #3

Did you know? Eight planets travel around the Sun in big loops called orbits.

Riddle: I have a round window but I'm not a spaceship. I drink water and spin round and round like a planet in orbit. I eat dirty clothes!

Hide in: a lamp

MISSION CONTROL #4

Did you know? Mercury is the closest planet to the Sun. It goes all the way around in just 88 days, so a year there is only 88 days long!

Secret code: 3 - 12 - 15 - 3 - 11. Mercury would win a race against me! (Code: A=1, B=2, C=3 … Z=26)

Hide in: the washing machine

MISSION CONTROL #5

Did you know? Mercury has no air to keep it cozy, so its days are boiling hot and its nights are freezing cold.

Riddle: I'm shaped like a hand, but I only have a thumb. I'm brave around heat, like Mercury in the daytime.

Hide in: a clock

MISSION CONTROL #6

Did you know? Venus is the hottest planet. Its thick clouds trap heat like a blanket.

Riddle: I have a door, a window and lots of buttons. I spin your food in a circle and BEEP when I'm done.

Hide in: the oven mitt

MISSION CONTROL #7

Did you know? Venus spins the opposite way from Earth, so the Sun rises in the west there.

Venus spins backwards, so read this backwards: X O B E U S S I T

> Walk BACKWARDS all the way there!

Hide in: the microwave (not running!)

MISSION CONTROL #8

Did you know? Venus is the brightest planet in our night sky. People call it the Evening Star, even though it's a planet.

Riddle: You can see right through me. At night, I show you Venus glowing in the sky. Look on my ledge.

Hide in: the tissue box

MISSION CONTROL **#9**

Did you know? Earth is the only planet we know of that has living things: people, animals and plants.

Riddle: I'm alive, but I can't walk or talk. I drink water and eat sunshine. What am I?

Hide in: a window sill

MISSION CONTROL **#10**

Did you know? Most of Earth is covered in ocean water. That's why Earth looks blue from space.

Fill in the missing letters: B _ T H R _ _ M S _ N K

Hide in: a houseplant

MISSION CONTROL **#11**

Did you know? Earth is tilted. When Canada leans away from the Sun, we get winter. When it leans toward the Sun, we get summer.

Riddle: We come in a pair and live by the door. We only go outside when Earth tilts away and the snow falls.

Hide in: the bathroom sink

MISSION CONTROL **#12**

Did you know? Earth spins around once every day. When your side faces the Sun it's daytime, and when it faces away it's night.

Riddle: I'm soft and I have no arms, but I hug you when your side of Earth is in the dark.

Hide in: the winter boots

MISSION CONTROL **#13**

Did you know? Only 12 people have ever walked on the Moon.

Riddle: I copy everything you do, but I never say a word. Look at me and you'll see a future Moon walker!

Hide in: a cozy blanket

MISSION CONTROL **#14**

Did you know? The Moon goes through all its shapes, from thin to full, in about a month. The word "month" comes from "Moon"!

Riddle: I have 12 pages, one for every time the Moon shows all its shapes. Each page is full of numbered boxes.

Hide in: a mirror

MISSION CONTROL **#15**

Did you know? The Moon is covered in craters, holes made when space rocks crashed into it.

Unscramble: S - T - O - P. They're round and deep like craters, and they live in the kitchen.

Hide in: the calendar

MISSION CONTROL **#16**

Did you know? The Moon's pull is weaker than Earth's. You could jump about 6 times higher there!

Riddle: I'm soft and squishy and the whole family sits on me. Look under my cushions.

> Take 6 giant Moon bounces on the way!

Hide in: the pots and pans cupboard

Stage 3 Mars & the Asteroid Belt

Chits 17–22

MISSION CONTROL **#17**

Did you know? Mars is called the Red Planet because its dust is full of rust.

Only one planet is called the Red Planet. Now find something red and round that grows on a tree. Look where it lives with its fruit friends.

Hide in: under the couch cushions

MISSION CONTROL **#18**

Did you know? Mars has the biggest volcano in the solar system, Olympus Mons. It's about 2 and a half times taller than Mount Everest.

Math mission: How many moons does Mars have? Add 1. Go to that step on the stairs, counting from the bottom.

Hide in: the fruit bowl

MISSION CONTROL **#19**

Did you know? Mars has two tiny moons named Phobos and Deimos.

Riddle: I have fur but I'm not alive. I never leave your side at night, just like Phobos and Deimos never leave Mars.

Hide in: the 3rd stair from the bottom

MISSION CONTROL **#20**

Did you know? Scientists send robot rovers to drive on Mars, take pictures and study the rocks.

Secret code: 20 - 15 - 25 2 - 15 - 24 (Code: A=1, B=2, C=3 ... Z=26)

Hide in: favourite stuffed animal

MISSION CONTROL **#21**

Did you know? Flying to Mars takes about 7 months. Astronauts would need to pack LOTS of food.

Riddle: You open me every morning. Shake me and I rattle. Pour me in a bowl and add milk!

Hide in: the toy box

MISSION CONTROL **#22**

Did you know? Between Mars and Jupiter is the asteroid belt: millions of space rocks circling the Sun.

Riddle: Paper, cans and plastic come to me so they can be used again. What am I?

Hide in: the cereal box

Stage 4 The Giant Planets

Chits 23–33

MISSION CONTROL **#23**

Did you know? Jupiter is the biggest planet. More than 1,000 Earths could fit inside it!

Riddle: I have 4 legs but I never walk. You sit on me at dinner. Look underneath me, King Jupiter!

> Stand tall and say: "I am Jupiter, king of the planets!"

Hide in: the recycling bin

MISSION CONTROL **#24**

Did you know? Jupiter has a giant storm called the Great Red Spot. It's bigger than Earth and has been spinning for more than 150 years.

Fill in the missing letters: C _ A T P _ C K _ T

Hide in: under a dining chair

MISSION CONTROL **#25**

Did you know? Jupiter has more than 90 moons!

Jupiter has more than 90 moons. I have lots of pairs! We keep your toes warm and we sleep in a drawer.

Hide in: a coat pocket in the closet

MISSION CONTROL **#26**

Did you know? Jupiter's moon Europa is covered in ice. Scientists think there's a giant ocean hiding underneath.

Riddle: I'm even colder than my neighbour the fridge. Ice cream lives inside me, like Europa's ocean under the ice.

Hide in: the sock drawer

MISSION CONTROL **#27**

Did you know? Saturn's beautiful rings are made of billions of pieces of ice and rock.

Riddle: I'm a cardboard ring, just like Saturn's rings. I live in the room where you wash your hands, and I'm wrapped in soft paper.

Hide in: the freezer

MISSION CONTROL **#28**

Did you know? Saturn is so light for its size that it could float in water, if you had a bathtub big enough!

Read this backwards: B U T H T A B

Hide in: the spare toilet paper roll

MISSION CONTROL **#29**

Did you know? Saturn's biggest moon, Titan, has lakes and rain, but they aren't made of water. They are made of a gas so cold it turned into liquid.

Riddle: The more I dry, the wetter I get. What am I?

Hide in: the bathtub

MISSION CONTROL **#30**

Did you know? Uranus is tipped over on its side, so it rolls around the Sun like a ball.

Riddle: I'm a flat box with a board, little pieces and dice inside. Uranus rolls on its side, just like my dice.

Hide in: the bath towel

MISSION CONTROL **#31**

Did you know? Uranus is the coldest planet in our solar system. It's an ice giant.

Unscramble: Q - U - O - T - E. You wear it on your head when it's cold. (Hint: look near the mittens!)

Hide in: a board game box

MISSION CONTROL **#32**

Did you know? Neptune has the fastest winds in the solar system, much faster than any storm on Earth.

Riddle: Everyone steps on me, but I never complain. I say "welcome" at the front door.

Hide in: the toque and mittens

MISSION CONTROL **#33**

Did you know? Neptune is the farthest planet from the Sun. One trip around the Sun takes 165 of our years!

Secret code: 2 - 1 - 3 - 11 - 16 - 1 - 3 - 11 (Code: A=1, B=2, C=3 ... Z=26)

Hide in: the front doormat

Stage 5

Pluto, Stars & the Universe

Chits 34–40

MISSION CONTROL **#34**

Did you know? Pluto is a dwarf planet. It's smaller than our Moon and has a giant heart shape on it.

Riddle: I come in a box with lots of colours, and I get shorter every time you use me.

> Draw a heart for Pluto when you get there!

Hide in: the school backpack

MISSION CONTROL **#35**

Did you know? Comets are made of ice and dust. When they get close to the Sun, they grow long glowing tails.

Fill in the missing letters: L _ U N D R _ B _ S K _ T

Hide in: the crayon / art supply box

MISSION CONTROL **#36**

Did you know? Our Sun is just one of billions of stars in our galaxy, the Milky Way.

Riddle: I have lots of spines but no bones, and I'm full of stories. Find where we stand in a row.

Hide in: the laundry basket

MISSION CONTROL **#37**

Did you know? Groups of stars that make pictures are called constellations. The Big Dipper looks like a giant spoon in the sky.

Unscramble: N - O - S - P - O. The Big Dipper looks like me! Find the drawer where I live with the forks.

Hide in: the bookshelf

MISSION CONTROL **#38**

Did you know? There are billions of galaxies in the universe. Space telescopes take pictures of galaxies very, very far away.

Riddle: I have lots of buttons but no shirt. Click me and faraway places appear on a big screen.

Hide in: the cutlery drawer

MISSION CONTROL **#39**

Did you know? A black hole pulls so hard that nothing can escape, not even light!

Riddle: I roar like a lion, I have a long nose, and I slurp up dust like a black hole. (Don't worry, I'm unplugged!)

Hide in: the TV remote

MISSION CONTROL **#40**

Did you know? The universe is so big that light from the farthest galaxies has been travelling for billions of years to reach us.

FINAL secret code: 21 - 14 - 4 - 5 - 18 25 - 15 - 21 - 18 2 - 5 - 4 (Code: A=1, B=2, C=3 ... Z=26)

> Do a splashdown landing back on Earth first!

Hide in: the vacuum cleaner (unplugged)

Parent answer key

Use this list to set up. Keep it away from your astronaut.

Chit	Hide it in	The clue leads to
1	Hand to child	the fridge
2	the fridge	a lamp
3	a lamp	the washing machine
4	the washing machine	a clock
5	a clock	the oven mitt
6	the oven mitt	the microwave (not running!)
7	the microwave (not running!)	the tissue box
8	the tissue box	a window sill
9	a window sill	a houseplant
10	a houseplant	the bathroom sink
11	the bathroom sink	the winter boots
12	the winter boots	a cozy blanket
13	a cozy blanket	a mirror
14	a mirror	the calendar
15	the calendar	the pots and pans cupboard
16	the pots and pans cupboard	under the couch cushions
17	under the couch cushions	the fruit bowl
18	the fruit bowl	the 3rd stair from the bottom
19	the 3rd stair from the bottom	favourite stuffed animal
20	favourite stuffed animal	the toy box
21	the toy box	the cereal box
22	the cereal box	the recycling bin

Chit	Hide it in	The clue leads to
23	the recycling bin	under a dining chair
24	under a dining chair	a coat pocket in the closet
25	a coat pocket in the closet	the sock drawer
26	the sock drawer	the freezer
27	the freezer	the spare toilet paper roll
28	the spare toilet paper roll	the bathtub
29	the bathtub	the bath towel
30	the bath towel	a board game box
31	a board game box	the toque and mittens
32	the toque and mittens	the front doormat
33	the front doormat	the school backpack
34	the school backpack	the crayon / art supply box
35	the crayon / art supply box	the laundry basket
36	the laundry basket	the bookshelf
37	the bookshelf	the cutlery drawer
38	the cutlery drawer	the TV remote
39	the TV remote	the vacuum cleaner (unplugged)
40	the vacuum cleaner (unplugged)	under your bed (the prize!)
Prize	**under your bed**	**Mission complete!**

MISSION CONTROL

Certificate of Space Mission Success

This certifies that astronaut

_____

explored the Sun, all eight planets, Pluto, the stars and the universe, solved all 40 clues, and landed safely back on Earth.

Date: _____ Signed: Mission Control

More family activities at compassbyvavy.ca