この冊子は「令和2年度文化庁 地域と共創した博物館創造活動支援事業『ミュージアムを中心とした地域の多文化共生推進プロジェクト』によって作られました。
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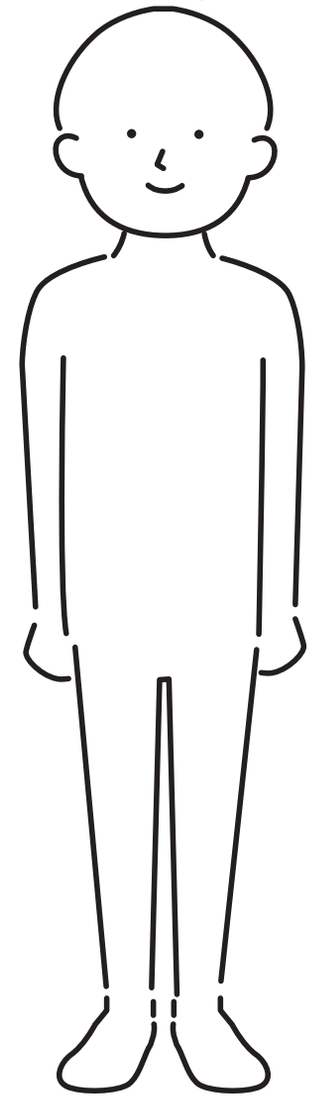
Tamarokuto Science Center Exhibit Worksheet (Upper Elementary Grades)

Let's Think About Life on the Moon Clothing Section

The main theme of the "Clothing Section" is "Spacesuits". The keyword is "Cosmic Ray".

Draw the clothes you're wearing today.

What is your favorite part of your outfit?



School: Grade: Class: Name:

Comparing the Earth to the Moon? **Star Profile**

	Earth	Moon
Size (diameter)	Approx. 13,000 km	Approx. 3500 km (Approx. 1/4 of the Earth)
Mass of Stars	Approx. 6×10^{24} kg	Approx. 7.3×10^{22} kg (Approx. 1/82 of the Earth)
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①

Exhibition Room 1

Meet the Science

「Cosmic Ray Observation」

How does the cosmic rays observation shine?

☐Straight ☐Wriggling

How many times per 10 seconds will it flash?

*The number of times will vary. _____ Times

These rays are called cosmic rays (radioactive rays), and they travel through space to the Earth.

Let's study what cosmic rays are.

The Focus of this Exhibit

Cosmic Rays (Radiation), Energy, Harm

②

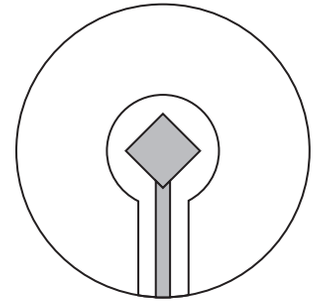
Exhibition Room 5

Geoscience

「Aurora」

Where on the displayed aurora shines brightly the more?

Let's take a look the display and color it.



What force on the Earth protects us from harmful radioactive rays?

Air・Magnet・Water

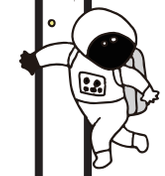
The Focus of this Exhibit

Magnetic Force, Solar Wind (Radiation)

③

The Corridor Between Exhibition Room 5 and the Planetarium.

「Astronauts」



Astronauts wear spacesuits.

Which parts of the body are not covered by spacesuits?

Head ・ Legs ・ None

Why are spacesuits designed in such a shape?

Let's study the impact of air and temperature.

The Focus of this Exhibit

Air, Temperature, Radioactive rays

Can we go to the moon in our usual clothes?

☐Yes ☐No

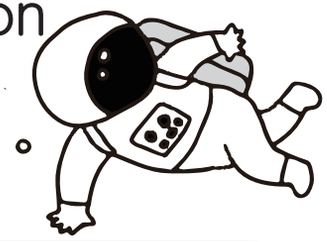
The reason is;

Tamarokuto Science Center Exhibit Worksheet (Upper Elementary Grades)

Let's Think About Life on the Moon

Clothing Section

Imagine what life on the moon would be like, then explain it with drawings and words.



What kind of clothes would you wear on the moon?

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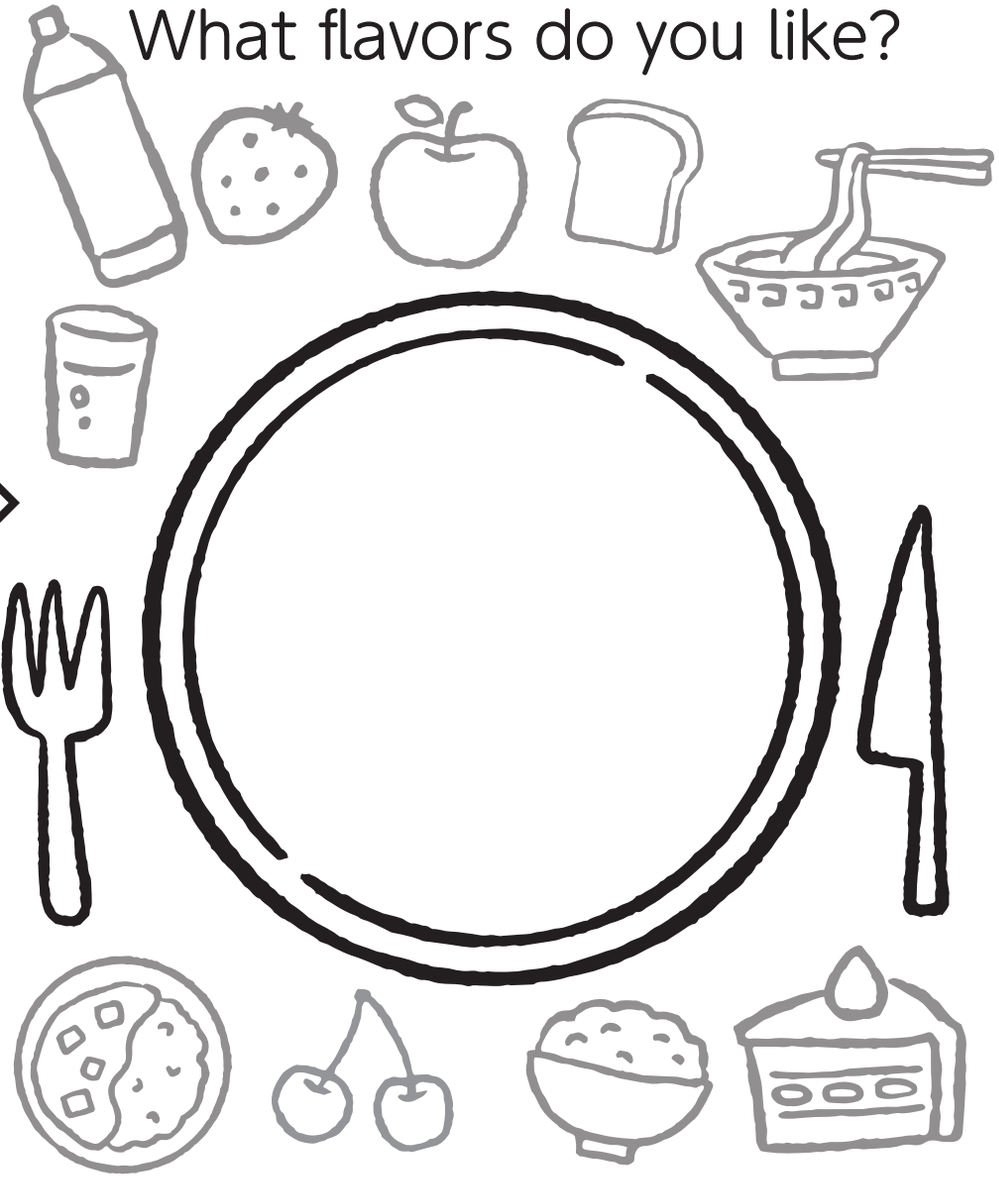
Let's Think About Life on the Moon

Food Section

The main theme of the "Food Section" is "Space Food". The keyword is "Gravity".

Draw your favorite food!

What flavors do you like?



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School: Grade: Class: Name:

①

Exhibition Room 4

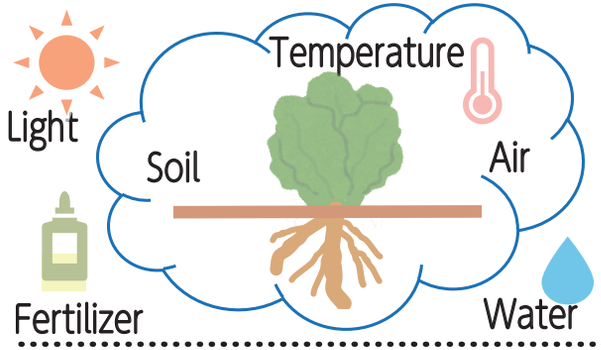
Life & Environment

「Tree Exhibition」

What do you need to grow vegetables?

There is one thing that you do not need.

Put a × mark by the side of the correct answer.



Are things that are needed to grow vegetables available on the Moon?

The Focus of this Exhibit

Germination, Growth

②

Exhibition Room 1

Meet the Science

「Moon Walker」

How is the gravity on the Moon different from that on the Earth?

Write the correct number within the parentheses.

If the gravity on the Earth is 1, the gravity on the Moon is ( ).

Can we eat miso soup and ramen in a moon environment?

Let's imagine and describe it.

The Focus of this Exhibit

Gravity

③

Exhibition Room 1

Meet the Science

「Space Food」

What kind of food can be eaten on space?

Let's find out what astronauts eat.

Circle the space food in the displayed list.

Rice・Steak・raw sliced fish・Hamburger steak・Parfait・sweet beans jelly

What do you do to bring food to space?

The Focus of this Exhibit

Preserving, Packing, Drying

Can we have usual meals on the moon?

☐Yes ☐No

The reason is;

Tamarokuto Science Center Exhibit Worksheet (Upper Elementary Grades)

Let's Think About Life on the Moon

Food Section

Imagine what life on the moon would be like, then explain it with drawings and words.

What kind of food would you eat on the moon?

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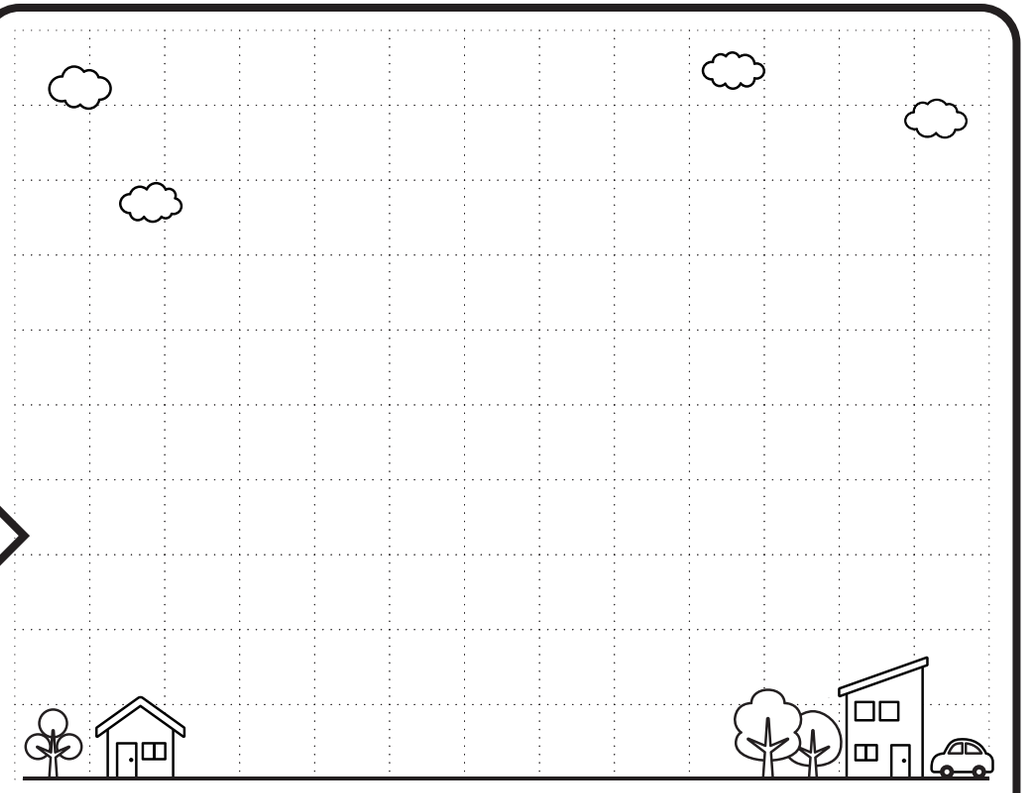
Tamarokuto Science Center Exhibit Worksheet (Upper Elementary Grades)

Let's Think About Life on the Moon

Housing Section

The main theme of the
"Housing Section" is "Facility".
The keyword is "Infrastructure".

Draw a house or a school!



Draw what you find at home or at school.
(Example)
・Door

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School: Grade: Class: Name:

①

Exhibition Room 3

System & Mechanism

「Electric Town」「Underground Exploration」

Let's check why we have access to water and electricity in our town.

Circle the correct answer.

Water reaches the tap at home from the purification plant via (water pipes / sewer pipes).

Where does electricity come from?

The Focus of this Exhibit

How Electricity is Delivered, How Water is Delivered

②

Exhibition Room 1

Meet the Science

「Moon Sand Replica」

Does the Moon have soil and rocks on it's surface, like the Earth does?

Yes・No

Connect things that match with a line.

Plagioclase ・ ・ Black

Basalt ・ ・ White

To build a house. Let's find out what materials are available on the moon.

The Focus of this Exhibit

Moon Sand, Heating

③

Exhibition Room 1

Meet the Science

「Lunar Base Concept」

Circle what has been planned on the moon base plan in 1994.

Rocket station・Air dome・Wind farm・Oxygen production plant・Science museum・Solar power plant

Which facility of the moon base does not exist on the Earth?

The Focus of this Exhibit

Atmosphere, Power Generation, Dome

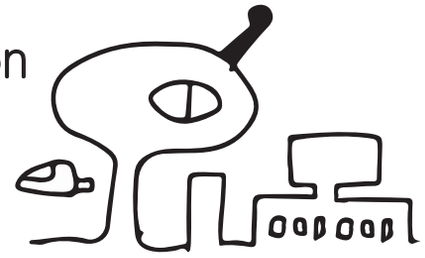
What kind of facilities do we need for houses and schools on the moon?

The reason is;

Let's Think About Life on the Moon

Housing Section

Imagine what life on the moon would be like, then explain it with drawings and words.



What kind of house would you live in on the moon?

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Let's Think About Life on the Moon Game Section

The main theme of the "Game Section" is "Movement". The keyword is "Gravity".

Write down your favorite outdoor activity!

What kind of movement do you like?

(Example)
・Play tag

School: Grade: Class: Name:

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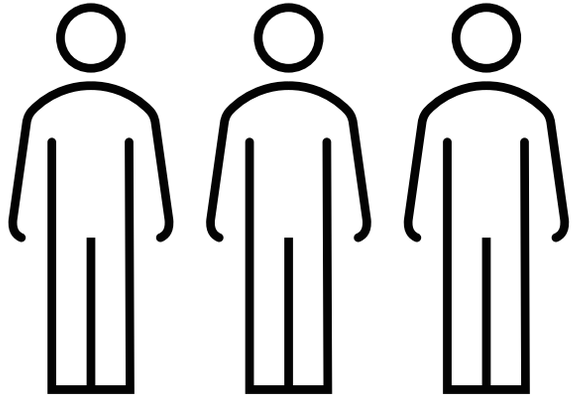
Exhibition Room 2

Body & Senses

「Human body exploration」

Where are the bones and muscles
that support the body located?
Color the illustration below.



Bone Structure　Muscles　Organs

The Focus of this Exhibit

Bone Structure, Muscles

②

Exhibition Room 2

Body & Senses

「Bone Structure of the Leg」

Let's see how your legs move
when you ride a bicycle.

Let's see how the bones move.
Circle the correct answer.

Bones from the knees to the ankles
move (up and down / right and left).

Let's see how the joints move.

The Focus of this Exhibit

Joint, Bone Structure, Direction of movement

③

Exhibition Room 1

Meet the Science

「Moon Walker」

Let's study how much higher you can
jump on the Moon than on Earth. ＿＿Times

Let's run or jump in the Moon environment.
Let's think about what kind of movements
you can do on the Moon.

The Focus of this Exhibit

Gravity

Can we make the same movements
on the moon as we do on Earth?

☐Yes　☐No

The reason is;

Tamarokuto Science Center Exhibit Worksheet (Upper Elementary Grades)

Let's Think About Life on the Moon

Game Section

Imagine what life on the moon would be like, then explain it with drawings and words.

What kind of playtime activities would you enjoy on the moon?