

My Nature Adventure Journal

Winter



This journal belongs to: _____

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Winter Time

by Robert Louis Stevenson

Late lies the wintry sun a-bed,
A frosty, fiery sleepy-head;
Blinks but an hour or two; and then,
A blood-red orange, sets again.

Before the stars have left the skies,
At morning in the dark I rise,
And shivering in my nakedness,
By the cold candle, bathe and dress.

Close by the jolly fire I sit
To warm my frozen bones a bit;
Or with a reindeer-sled, explore
The colder countries round the door.

When to go out, my nurse doth wrap
Me in my comforter and cap;
The cold wind burns my face, and blows
Its frosty pepper up my nose.

Black are my steps on silver sod;
Thick blows my frosty breath abroad;
And tree and house, and hill and lake,
Are frosted like a wedding cake.

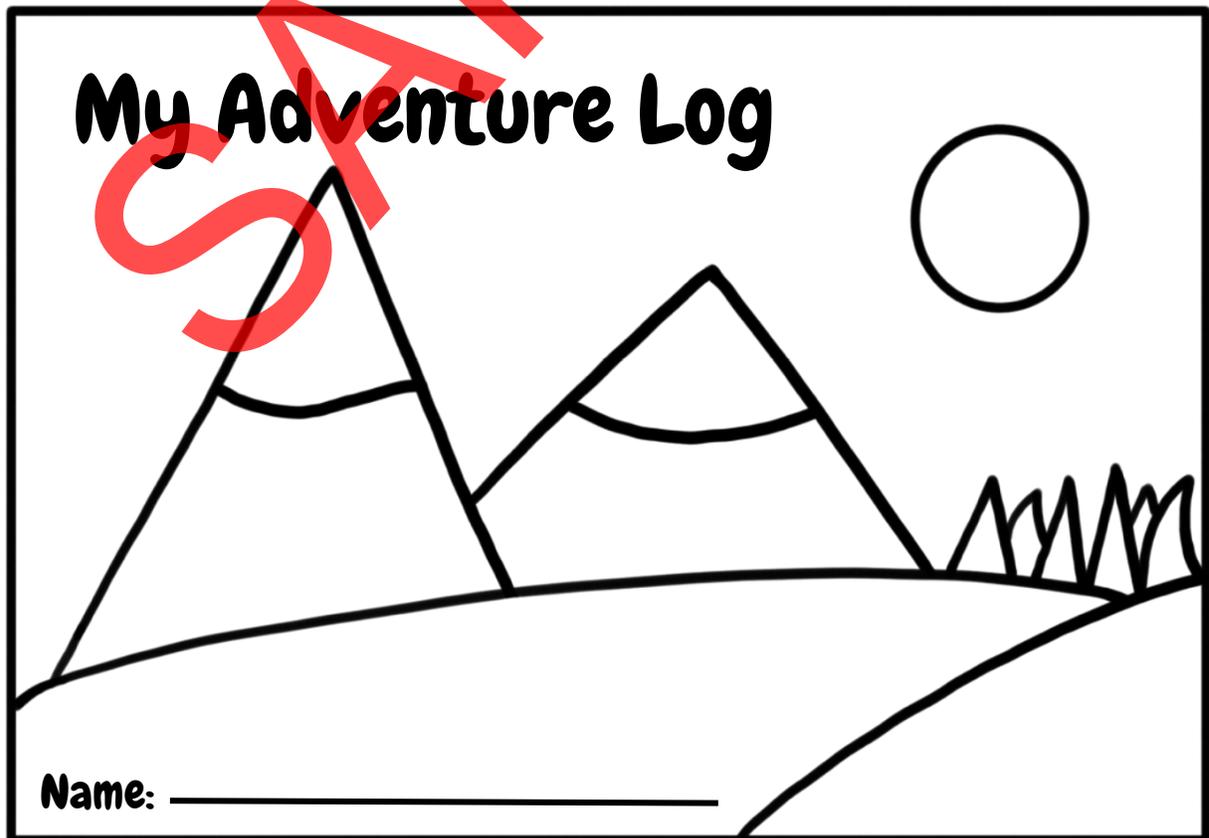
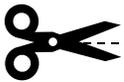
My Winter Adventure Log

Time to go outside! Fall is a wonderful season for outdoor adventures. An outdoor adventure can take place down a local trail, in your backyard, by a creek and so many other places.

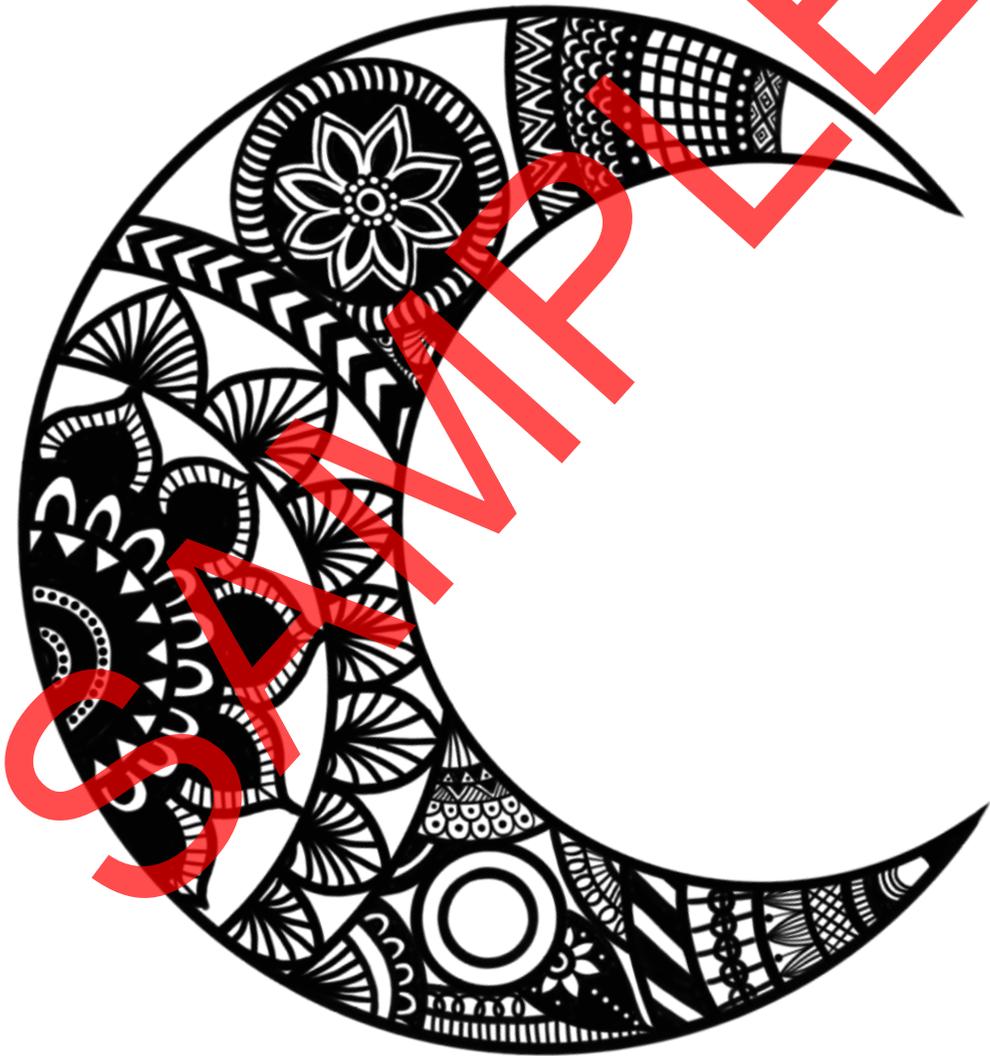
During the season of fall, go on at least **one (1) outdoor adventure each week** and add it to your adventure log.

Quick tips:

- Your field notes can be a picture, sketch, map or a description of any interesting plants or animals you saw on your adventure.
- If you want, you can **cut out** the Adventure Log image and the log sheets and staple them together into your very own **adventure log book**.



My Winter Moon



My Moon Phases

Have you ever wondered why the moon changes shape every night? It's very strange, don't you think?

Here's the thing. The moon doesn't change shape. The moon always stays the same shape, it's shaped like an egg, but depending on where the moon is on its journey around the earth the moon looks different to us.

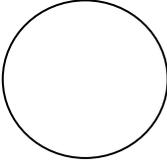
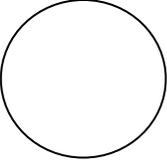
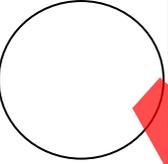
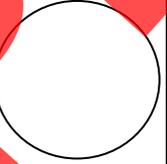
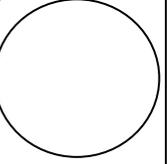
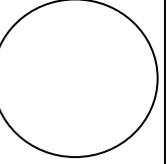
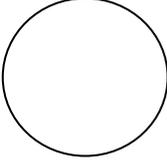
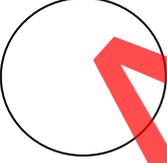
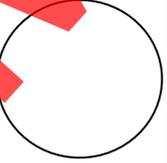
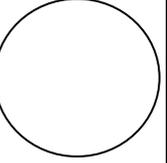
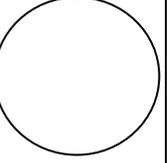
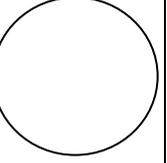
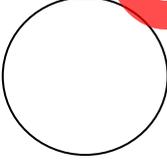
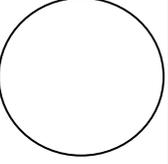
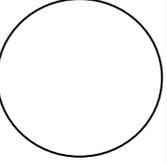
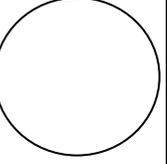
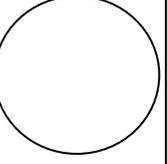
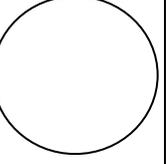
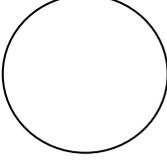
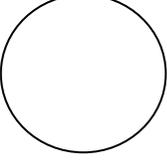
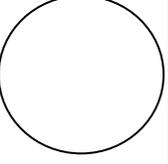
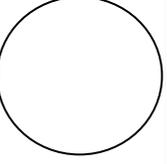
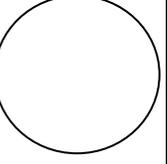
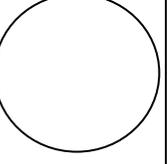
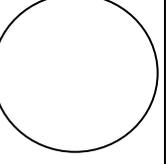
Remember that the moon doesn't make its own light like the sun does. The moon can only **reflect** sunlight. When the moon orbits the earth, the sun lights up different parts of the moon and that's why it looks like the moon is always changes shape.

It takes 29.5 days for the moon to go through its eight **moon phases** – one **lunar** month. Do you know what the eight phases are? Here they are:

1. **New moon**
2. **Waxing Crescent**
3. **First Quarter**
4. **Waxing Gibbous**
5. **Full moon**
6. **Waning Gibbous**
7. **Third Quarter**
8. **Waxing Crescent**

My Moon Phase Calendar

Time to go outside! For a whole month go outside, look at the month and fill out your moon phase calendar. If there are clouds hidden the moon look for the moon phase on the internet.

Date: 	Date: 	Date: 	Date: 	Date: 	Date: 	Date: 
Date: 	Date: 	Date: 	Date: 	Date: 	Date: 	Date: 
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Footprints in the Snow

“Look over there!” I whisper excitedly to my sister, “there’s something moving under that large pine tree just ahead of us.”

Last night a big snow storm covered everything in a thick layer of fresh fluffy snow. This morning we wanted to be the first to make footprints in all that fresh new snow but when we got outside something had already made tracks through the snow.

The tracks are too small to be made by people. Some sort of animal must have made them. Our mission is clear: find out who made these tracks!

We carefully look at the snow and follow the tiny hopping footsteps. They hop, hop, hop through the snow with two tiny feet and then disappeared. It must have been a small bird. Maybe it was a chickadee.

“More footprints!” my little sister squeals with delight.

Right ahead of us there’s another set of footprints in the snow. These ones are different. This animal has four feet. The back feet are bigger than the front feet and this creature hops too.

We followed the hopping footprint all the way to a large snowy pine tree.

“There’s definitely something under there,” I tell my sister.

Together we quietly crawl up to the tree and peek into the branches. It’s dark under the tree I see something move. The critter is white with two long white ears.

It’s a rabbit!

Different Types of Snow

When snow falls from the sky it comes in all different shapes and sizes. Snowflakes are amazing, and you can learn more about them on page 41 of your journal.

When snowflakes fall to the ground, they become part of the **snowpack**. The snowpack is all the snow and ice that is lying on the ground. Did you know that snow continues to change after it falls on the ground? It does!

Snow on the ground changes depending on the weather, where it falls and how long it has been sitting there. Here are some different types of snow that you might see on your adventures outside.

Corn Snow: Snow that melts during the day and refreezes at night, over and over again. Corn snow is wet and looks like small pellets.

Depth Hoar: Large ice crystal that form at the bottom of a snowpack when the bottom of the snowpack is warmer than top of the snowpack.

Firn: Snow that has been on the ground for more than one year.

Powder Snow: Newly fallen, light and fluffy snow.

Rain crust: A hard layer of snow on the top of the snowpack made by rain landing on the top of the snow and freezing.

Slush: Snow that is starting to melt.

Sun crust: A hard layer of snow on the top of the snowpack made by the sun melting and refreezing the snow crystals on top.

Watermelon Snow: Snow that is covered by a red algae called *Chlamydomonas nivalis*.

Wind crust: A hard layer of snow on the top of the snowpack made by wind blowing away the light, loose snow on top.

Glossary

Adaptations: A change that makes animals or other organisms better able to live in certain places.

Avalanche: A bunch of snow, ice and rocks that slide down a mountain.

Bird Count: A yearly event when people around the world count birds to help scientists learn more about birds.

Browse Marks: Marks that animals leave on trees, branches and plants after eating these things.

Celsius: A way of measuring temperature based on water freezing at 0° and water boiling at 100°.

Conifer: A type of tree that usually has needles and cones.

Deciduous: A type of tree that loses all its leaves at once in the fall.

Equator: An imaginary line that goes through the center of the earth.

Evergreen: A type of tree that does not lose all its leaves at once.

First Quarter Moon: When the moon disk is half lit up by the sun.

Fahrenheit: A way of measuring temperature where water freezes at 32° and boils at 212°.

Full moon: When entire moon disk is lit up by the sun.

Hexagon: A shape with six straight sides and six angles of 120°.

Hibernator: A creature that hibernates.