# (MS)²TC Science 7 Summer Work
# 2021 – 2022

The following summer work is recommended for students entering the 7th grade at MS2TC in the fall of 2021 – 2022. The work is designed to help students build science processing skills and to continue the learning process over the **summer break**.

1. Log on to **IXL** at the following **URL**: https://www.ixl.com/signin/ms2tc
- Enter your username and password and click "Sign in."
  **Username:** WCS student ID number@ms2tc
  **Password:** WCS Office 365 password
- Take the **Diagnostic** and visit the **Recommendations** page for skills that are picked just for you. You can also explore skills by grade or topic.

**IXL** is designed to help students learn at your own pace. The program is adaptive and will adjust based on your demonstrated understanding of the material. It is recommended that students use IXL regularly during the summer break to help build essential skills in math, language arts, and science.

2. Get outside and observe nature! Complete the following field study activities to help you make better observations.

## Activity 1: Mapping

**Overview**
You will observe and map your backyard. In the process, you will create maps of plant distributions and focus on patterns made by species growing in a variety of conditions, such as soil moisture, light, or disturbance. You may observe that plants are not randomly distributed but form patterns on the landscape in response to growing conditions.
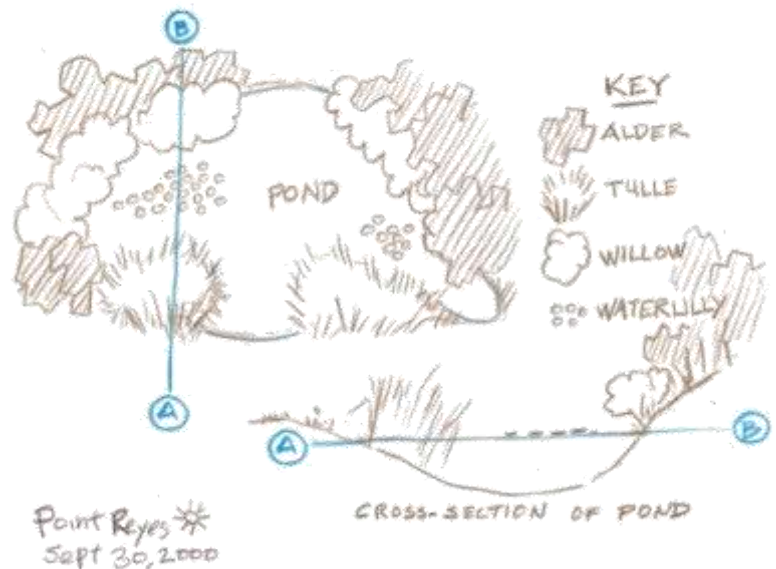
**Suggested Time:** 45 min.
**Location:** Your backyard

**Procedures**
1. Observe your backyard. Note how clear boundaries of vegetation patterns or landscaping choices are visible.



sample map

2. Create a map of your backyard. Your map should be to scale. For example, the scale can be 1 inch is equal to 10 paces. You may use graphing paper for this activity; it will make scaling your map easier.

3. Include labels, measurements, and a key in your map. If you find any interesting landmarks or evidence of animals, put them on the map. See the sample map.

# Activity 2: Nature's Treasure Map
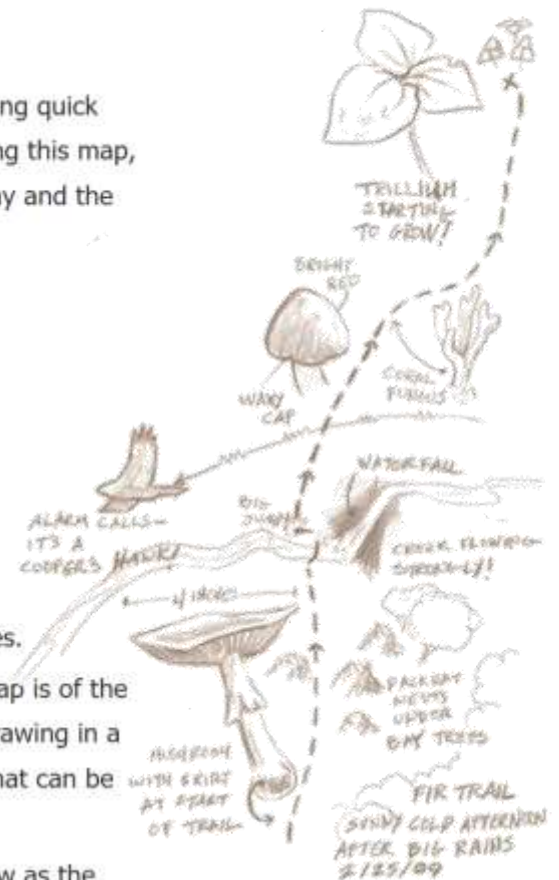


## Overview

You will construct a map of treasures found along a trail as you hike, making quick sketches and creating place names for the sites of your sketches. In making this map, you will process your experience and can better recall events along the way and the spatial relationships between your discoveries.

**Suggested Time:** 1 hour.

**Location:** Outdoors where you can hike along a section of trail.

## Procedure:

1. You will make a treasure map along the trail while hiking.

2. Move slowly along the trail looking for interesting nature discoveries.

3. Unlike a pirate map where the treasure is found at the end, this map is of the treasures you discover along the way. To get started, make one drawing in a corner of your journal page of a plant, landform or other feature that can be easily seen from your starting location.

4. Then start the dashed line that will show the hike route. It will grow as the hike progresses.

5. Stop at the next interesting natural feature you find. Make a one-minute sketch and move on.

6. Add quick sketches of birds like hawks flying over and of their trajectories, landmarks, tracks, galls, opening flowers, and whatever else you find of natural interest.

7. Connect these discoveries with the dotted line showing the route that you are taking.

8. Include quick sketches and invent place names along the way. Be playful and creative with species and place names; make up fanciful names if you do not know the scientific or accepted names of things you observe.

9. The end result will resemble a pirate's map. See the sample map to the right.

(**Note:** If you are making a loop hike, consider which side or corner of the page would be the most appropriate to start the map so as to leave room for the full loop on the page.)