



EDUCATOR GUIDE

Computer Science

Coding FUNdamentals Part 1

Upper Primary | Grades 3-5 | Ages 8-11

[EDUCATION.MINECRAFT.NET](https://education.minecraft.net)

Animal Research Template

Lesson Description: In this lesson, students will safely conduct internet research on different animals.

Time: 60 minutes per session

ISTE Standard(s):

1.3.a Students plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.

1.3.b Students evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.

1.6.a Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.

CSTA Standard(s):

1B-IC-2 Use public domain or creative commons media, and refrain from copying or using material created by others without permission.

Teacher Preparation:

- Make sure students have Internet access for independent research.
- Prepare a digital space for students to collaborate and share their research.

Theme Overview:

In this lesson, students will research animals: sea turtles, polar bears, panda bears, and gray wolves. Students will utilize a digital platform (such as OneNote, Microsoft Teams, etc.) to work with their group members. Students will conduct Internet research to find credible information to use in their research projects.

Learning Objectives:

By the end of this lesson, the students will be able to:

- Collaborate in digital spaces
- Utilize efficient digital searches to locate information to answer question in their research templates

Lesson Activities:

Direct Instruction (Teacher Directed; "I Do")

Begin the lesson by explaining to students that throughout this Animal Research Center unit, students will be exploring different types of animals and their habitats in this internet research project.

Session 1: Sea turtles

Session 2: Polar Bears

Session 3: Panda Bears

Session 4: Gray Wolves

Provide each student with two different sticky notes. On one sticky note, have the students write one fact they know to be true about (animal). On the other sticky note, have the students write one question that they would like to find out about (animal). Throughout their research, the goal will be to confirm what they already know and to also be able to answer their own question.

Provide some context to the lesson by showing students a brief video clip about the (animal).

Sea Turtles	Polar Bears	Panda Bears	Gray Wolves
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After watching the video clip, reassess the sticky notes to see if any students were able to confirm their facts or answer their questions.

Guided Instruction (Teacher Modeling; "We Do")

Explain to students that they will continue to work on researching more about the animal and their habitats. Direct students to use the animal research template in the digital platform. Over the next class session, students will work to answer the questions/information within the template. However, before they begin independent work, the teacher should provide some guidance around effective research practices (Sources of Information and Web Site Credibility). Model how to complete Page 1-2 of the research template before releasing students to independently work.

Sources of Information	In order to effectively research, we need to think about how to pull the most relevant information needed to answer our research questions and/or research topics. The first page of the research template is going to allow to consider what type of keywords and phrases we should use in our search. We are also going to consider what search
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	engines we can use to pull information from as well. Different search engines can yield different search results.
Web Site Credibility	Anyone can post something on the Internet. It is our job to ensure we are investigating the web site and uncovering the credibility of the web site and its content. the second page of the research template is going to help us analyze the information we find on the internet to determine whether we should use it or not.

Independent Work (Teacher Support; “You Do”)

Provide students with time to complete their independent research.

Assessment

Students should be able to answer the following questions:

1. What are some different sources of information we can access?
2. How can we determine what types of websites to use during research?
3. Why is learning how to research important?

SOURCES OF INFORMATION

<p>What is the MAIN topic you are researching?</p>			
<p>Brainstorm and write down as many SEARCH TERMS as possible.</p>			
<p>Consider what SOURCES where your topic is most likely to be found. Circle which sources you anticipate on finding.</p>	<ul style="list-style-type: none"> Online Encyclopedia Online Magazine Online Newspaper Specialty Blog Online Reference Database Peer Reviewed Journal Expert (Interview) Online Media Clips Website(s) 		
<p>Try using three different search engines. Write down which search engines you intend on using.</p>	<p>Search Engine 1</p>	<p>Search Engine 2</p>	<p>Search Engine 3</p>

What is the same keyword/phrase you are going to use to compare/contrast the results from the different search engines?			
What was the top result from each of the search engines? Write down the website/source responsible for the website.			

WEB SITE CREDIBILITY

As you encounter a website, use the following chart to help you decide whether this is a credible source for your research.

Website Address	Author Is there an acknowledged author(s)? Is there a way to contact the author?	Authority Is the author qualified to write the site?	Current When was the site created? When was the site last updated?	Source What is the domain*?	Overall Does the site have facts, opinion, mistakes, or good info? Is it easy to use?	YES/NO Will you be using this website?

*Domain Information

.com	.com is a commercial site (Commercial sites can have an agenda that may possibly influence the quality of information.)
.net	.net is an internet source (Like .com, .net sites can be excellent resources, but they may be very unreliable depending on the author.)
.gov	.gov is a government site (Since these are published to the Web by the government, they are usually reliable.)
.k12	.k12 is a school site (Information here may be the work of students or teachers. Check to see who's responsible for the content.)
.edu	.edu is a school or university site (Determine who wrote the site and what qualifications or research is involved in creating the site.)
.org	.org is an organization (Some organizations are excellent resources and others are very opinionated).

Let's try an example together:

Website Address	
Author Is there an acknowledged author(s)? Is there a way to contact the author?	
Authority Is the author qualified to write the site?	
Current When was the site created? When was the site last updated?	
Source What is the domain*?	
Overall Does the site have facts, opinion, mistakes, or good info? Is it easy to use?	
YES/NO Will you be using this website?	

Animal Research Template

Name of animal	
Image of the animal	
Life Expectancy	
Physical Description of the animal (e.g., animal classification, height, weight, color, special characteristics, etc.)	
What continent(s) can this animal be found?	

<p>What type of habitat does this animal live in? Describe the habitat in detail.</p>	
<p>Animal's Diet</p>	
<p>Animal's Enemies</p>	
<p>Is this animal endangered?</p>	
<p>Human Impact on this animal</p>	

Interesting facts about
this animal