

TECHNOAnimal

A Primary Technology Project

Teacher Guide

For PowerPoint 2013



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from this sample file.

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Quickly find an assignment or task in the Table of Contents.

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INTRODUCTION

GETTING STARTED

In this project, students use PowerPoint 2013 to report important information about an animal. Various resources are used to gather the facts. Students learn about the animal's diet, habitat, appearance, young, and threats that may be affecting its existence. Students organize this information to create an interesting multimedia presentation.

- How to Use this Guide
- How to Use the Resource Files
- Project Overview
- Preparing to Teach

How to Use This Guide

This Teacher Guide contains the following three sections:

- 1) Getting Started
- 2) Project Instructions
- 3) Appendices

Below is an explanation of each section.

- 1) Getting Started – this section contains the overview of the project theme, explanation of activities, and a list of sessions.
- 2) Project Instructions – this section contains the detailed instructions for each session in length. A session is a problem-solving activity or project containing assignments which are the core of the session. A session includes the following parts:
 - Overview – an explanation of the session.
 - Materials – a list of handouts, sample files, templates, flashcards, and teacher resource materials needed to teach the session.
 - Teaching Strategies – instructional methods recommended for teaching the activities.
 - Lesson Plan – a detailed list of each step in the session.
 - Learning Objectives – a summary of the content knowledge and technical skills taught throughout the session. Content knowledge is information about the topic area. Students learn about a particular topic or subject area. A technical skill is the ability to use the computer to complete a given task. Students acquire knowledge of software tools and program features to effectively use the computer to solve a problem.
 - Assignments – a session consists of assignments completed by students. Actions to be performed on the computer by the student are indicated with a mouse button (☞). Background information and instructions are indicated with a dash (–).
 - Review – a session review that contains a list of fill-in-the-blank, multiple choice, or short-answer questions intended to review both concept and technical knowledge (answers included).
 - Skill Review – an additional assignment intended to review technical skills (includes completed sample).
 - Extension Activity – an additional activity that relates to the problem-solving task presented in the session.
- 3) Appendices – this section contains additional information or materials including the following resources.
 - Software application tools – additional information for teachers about the software applications used to complete the project.
 - Terminology – a list of terms introduced in the project.
 - Glossary – a definition of each term.
 - Contact Information – how to contact TechnoKids Inc. for curriculum support.

This section explains the structure of all TechnoKids Teacher Guides.

How to Use the Resource FILES

About the Resource Files

Accompanying the project are resource files. These files are organized in folders categorized by session. Each folder contains the resources needed to complete the activities. Below is a description of each material:

- *Assessment Tools* are digital files that list the learning objectives addressed and are customizable.

Resource files are digital, customizable files such as handouts, assessment tools, and review activities.

of program tools placed on a 3.75" x 3.75" sheet of paper, making an essential visual aid. Print using a color printer and an electric laminating machine, mount, or use a clear adhesive to increase durability.

Some materials that must be printed, photocopied, and laminated. Handouts are available digitally so that teachers can print them as necessary, such as the parent letter and review questions.

Some materials include Internet addresses made available to students for use in activities.

- *Review Questions* are customizable files used to assess students' knowledge of program commands and concepts.
- *Sample Files* are examples of a finished product. They are provided to allow teachers the opportunity to assess the components that complete the project and the computer tools used during its creation. Sample files are designed to model activities and set a standard upon which students should strive to achieve. These files allow students to study the components of an activity individually or as a class.
- *Skill Reviews* are files used to complete activities that focus on practicing technology skills addressed in the project.
- *Teacher Resources* are materials intended for the use of the teacher. These include visual or research aids such as the Animal Fact Sheets. Teachers may want to utilize these resource materials when teaching a session.

Resource Files

The following is a list of the necessary materials for this project. A digital copy of each appears in the *TechnoAnimal Resources* folder in the location indicated.

Assessment Tools

| | |
|-----------|---|
| Session 7 | Summary of Skills \\Session 7\Evaluation\Summary of Skills |
| Session 7 | TechnoAnimal Marking Sheet \\Session 7\Evaluation\TechnoAnimal Marking Sheet |

Handouts

| | |
|-----------|---|
| Session 7 | TechnoAnimal Certificate of Achievement \\Session 7\Handouts\TechnoAnimal Certificate of Achievement |
| Session 7 | TechnoAnimal Parent Letter \\Session 7\Handouts\TechnoAnimal Parent Letter |

Included with each guide is a complete directory of resource materials.

Project Overview

Introduction to TechnoAnimal

In this project, students create a multimedia report about animal. Using various resources, they gather facts about the diet, habitat, appearance, young, and threats of their selected animal. These facts are organized onto slides to produce an interesting and informative presentation.

Students complete the following tasks:

1. In Session 1, students are introduced to the animal research project. To begin, they learn about the attributes of various classes of animals including mammals, reptiles, amphibians, birds, and insects. After this introduction, students watch a sample presentation about the polar bear. They examine the content to learn about what should be included in their animal research project. Using various research sources, students collect information about an animal of their choice. They gather facts about their class, habitat, appearance, food, young, and threats.
2. In Session 2, students draw their animal in its habitat. To prepare for this task they are introduced to the tools in Microsoft Paint. They then apply this knowledge to create their picture.

The Project Overview gives a synopsis of what is accomplished in each session.

first two slides of their slide show. Using PowerPoint 2013, and apply a theme to the presentation. Afterwards they describe the animal habitat. Students change the slide

create their presentation. To begin they make a slide description of the animal, as well as an explanation of how it survive. Afterwards, the picture drawn in Session 2 is inserted. On it, they list what the animal eats. A picture of one of the food items.

two slides to their presentation. To begin, they make a slide that includes facts and a picture of the baby. Afterwards they explain any dangers that the animal may be facing and

6. In Session 6, students put the "finishing touches" on their presentation. To begin they edit the spelling on each slide. Students then apply transition effects. Upon completion, the slide show is shared with their classmates.

Preparing to Teach TechnoAnimal

A few steps should be taken in preparation of this project to ensure that each computer workstation has the necessary materials available to students. Follow the steps below to transfer **ALL** necessary files to each workstation.

The following steps must be completed:

- Step 1 Install Software
- Step 2 Copy the Animal Folder
- Step 3 Create a Shortcut to the Animal Folder (Optional)
- Step 4 Modify the Shortcut Icon (Optional)

Step-by-step instructions explain how to prepare student workstations.

Step 2 Copy the Animal Folder

The contents of the *Animal* folder must be placed on each computer workstation. This folder contains files used during this project.

1. If you have a CD, place it into the CD drive. If it does not automatically play, open Computer and then double click the CD drive icon. Now double click the TechnoAnimal Resource folder in the pri-animal-2013 folder.

If you do not have a CD, go to where the project files are stored, and double click the TechnoAnimal Resource folder.

2. Right click on the Animal folder and choose *Copy*.
3. Go to the location where you want to place the folder; for example, workstation or network share. (See your System Administrator if using a server).
4. Right click at this location and choose *Paste*.



SESSION 1

Animal Facts

In this session, students are introduced to the animal kingdom. They learn about the attributes of various animals, including reptiles, amphibians, birds, and insects. A sample presentation about the polar bear is provided. About what should be included in a presentation. Using various research sources, students collect information. They gather facts about their chosen animal and its threats.

- Assignment 1: About A
- Assignment 2: Introduc
- Assignment 3: Just the

Each Technokids project contains assignments that are spread over 6 sessions. Although teaching time may vary; each assignment takes about 20 minutes to complete.

begin, animals, watch a learn various choice. and

Session 1 Extension Activity: Circle the Animal Class

Session 1 Animal Facts

Getting Started

Overview

In this session, students are introduced to the animal research project. To begin, they learn about the attributes of various classes of animals including mammals, reptiles, amphibians, birds, and insects. After this introduction, students watch a sample presentation about the polar bear. They examine the content to learn about what should be included in their animal research project. Using various research sources, students collect information about an animal of their choice. They gather facts about their class, habitat, appearance, food, young, and threats.

Materials

- Polar Bear presentation
 - Animal Fact Sheets (Optional)
 - Internet Explorer – research (Optional)
 - Acceptable Use Policy (Optional)
 - Resource materials – reference books, interactive encyclopedia, magazine (Optional)
 - TechnoAnimal Favorites (Optional)
-

Teacher Preparation

- The Animal folder must be copied to each workstation before instruction begins. This folder contains the sample presentation and templates necessary to complete the activities in this project.
 - Print the Animal Fact Sheets (Optional)
 - Ensure your students/parents/guardians have read & signed the Internet Acceptable Use Policy before going online. (Optional)
-

Teaching Strategy

In this project, students create a multimedia report about an animal. This session includes gathering facts for the report. Explain the scenario to students:

In this session, you are going to research an animal of your choice. Using various resources, you will discover many facts about your animal. Later you will take all this information and make a slide show so that you can share your knowledge with your classmates using the computer.



This section, for teachers,
explains each assignment
and gives helpful tips.

ANIMAL FACTS

Assignment 1 About Animals

In this assignment, students learn about the amphibian, reptile, bird, mammal, and insect animal classes. It is important to note that this is not an exhaustive list of animal classes.

Read the information together. Think about other animals that also belong to each class.

Assignment 2 Introduction to Animal Research

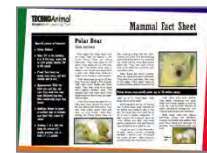
In this assignment, students examine a sample presentation about the polar bear. It includes information about animal class, habitat, appearance, food, young, and threats. Explain each of these terms to students prior to watching the presentation.

- *What is habitat?* Habitat is the place where an animal *lives*. This includes the country (Canada), region (desert, ocean, arctic), or type of home (nest, cave, den).
- *What is food?* Food is something the animal eats. Sometimes this is called *diet*.
- *What is appearance?* Appearance is what the animal *looks like*.
- *What are young?* Young is another word for *baby*.
- *What is a threat?* Threats are anything that is placing the animal in danger. Other animals that are threats are called *enemies*.

Assignment 3 Just the Facts

In this assignment, students select an animal and gather facts about the class, habitat, appearance, food, young, and threats.

Animal Fact Sheets have been provided. Please note that subject categories are limited to the following animals:



| Insect | Mammal | Reptile | Amphibian | Bird |
|-------------------------------------|----------------------------------|-------------------------------------|------------------------------|-----------------------------|
| Monarch butterfly Praying Mantis | Blue Whale Lion Polar Bear | American Alligator Desert Iguana | Mudpuppy Poison Dart Frog | Blue Jay Emperor Penguin |

If your students would like to select other animals, give them access to the following resources:

- Internet – you may prefer to bookmark specific sites for your students to visit and gather their information. Some sites have been provided and are included in the *TechnoAnimal Favorites* folder. To use these sites, click *Favorites* on the Internet Explorer toolbar and expand *TechnoAnimal Favorites* in the work pane.
- Interactive encyclopedia
- Textbooks
- Magazines
- Audio/visual materials

TIME SAVING TIPS**Group Work:**

Research projects can quickly become very time consuming. To save time consider having students work in partners or groups. Each person has a topic to research such as class, habitat, appearance, food, young, or threats. Students, then share their findings with their group members. This saves valuable time!

Use a Highlighter:

Writing out the facts onto a piece of paper can take a *long* time. Instead have students color-code the facts using a highlighter or other writing tool. For example, highlight the food information pink, habitat yellow, appearance green, young purple, and threats orange. Now they can quickly find the information in later sessions when they need to add it into their report.

Skim and Scan:

If your students read every word, it will take them a *long* time to collect their facts. Teach them how to skim and scan. Have them look for only keywords. For example, if researching food, look for the words food, diet, or eat. Or if researching habitat look for country names, region types, live, habitat, or home.

Lesson Plan

Assignment 1 - About Animals

- Read information about amphibians, reptiles, birds, mammals, and insects.
- Classify animals by their class.

Assignment 2 - Introduction to Animal Research

- Watch the polar bear presentation.
- Answer questions about the content of the presentation.
- Close PowerPoint 2013.

Assignment 3 - Just the Facts

- Use various resources to research an animal's class, appearance, food, young, habitat, and threats.

The Lesson Plan lists individual steps in each assignment.

Learning Objectives

Below is a list of the learning objectives for this session. Students should be able to complete each task independently.

Content Knowledge:

- classify animals by their class including mammal, insect, reptile, amphibian, and bird
- research animal facts: habitat, appearance, food, young, and threats

Technical Skills:

Operating Environment Skills

- open and close a program
- open and close a window
- open a saved file
- single click, double click, and right click the mouse

Internet Research Skills (Optional)

- open a web page using a webpage shortcut
- search using keywords
- scroll in a browser window
- move to another page using a hyperlink

Applied Technology Skills

- view a slide show and examine the content
- research an animal using various resources

Each session provides a list of Learning Objectives. A checklist of all objectives is provided at the end of the project in Session 7.

Assignment 1: About Animals

There are many kinds of animals in the world. Many animals are the same. Others are different. Animals that are the same are put into classes. Some animal classes are amphibians, reptiles, birds, mammals, and insects. There are many more classes.

Read to learn about each animal class.

Amphibians

- Amphibians lay their eggs in water.
- Amphibians are born in the water.
- Some baby amphibians look like small fish.
- Amphibians can walk on land and swim in water.
- Adult amphibians can live on land.
- Amphibians are cold-blooded.
- Their temperature changes with the outside temperature.
- Amphibians hibernate during the winter if they live in cold climates.

Some amphibians are the salamander, frog, toad,

Each session introduces a scenario that is broken down into assignments. Where applicable, resource materials have been created to model a concept or idea.



salamander



frog



toad



newt

Insects

- Insects have a hard outer cover for their body.
- An insect's body has three parts. These are the head, thorax and abdomen.
- Insects have antennae on their head.
- Insects have good eyesight. This is because their eyes have many lenses.
- Baby insects come from eggs.
- Insects have six legs.

Some insects are the fly, bee, butterfly, praying mantis, moth, and beetle.



fly



bee



butterfly



praying mantis



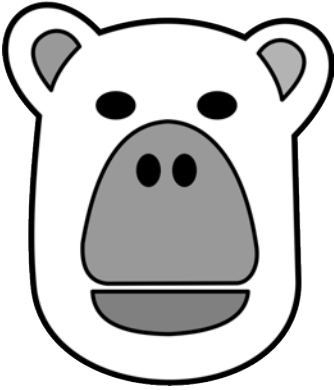
moth



beetle

Classify the Animals

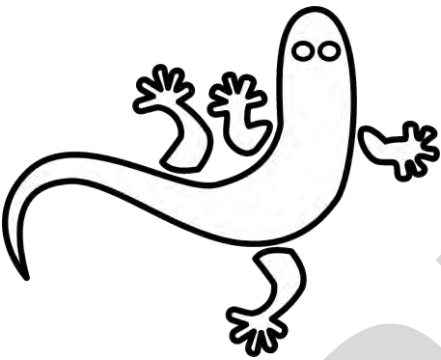
Circle the correct class for each animal.



mammal

amphibian

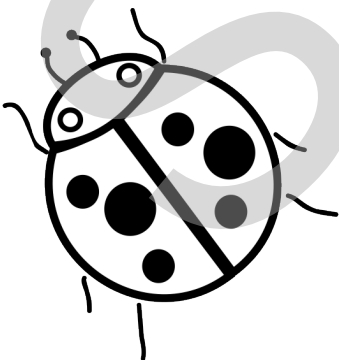
reptile



mammal

amphibian

Student worksheets are provided for off-computer instruction and concept review. Assignments, reviews, and extension activities are provided as separate documents for quick access.



reptile

insect

bird

Assignment 2: Introduction to Animal Research

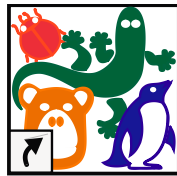


You are going to learn about your animal. You will put the facts into a presentation using PowerPoint 2013.

Watch the *Polar Bear* presentation. It is a sample of a finished presentation. Look at it to get ideas for your own presentation.

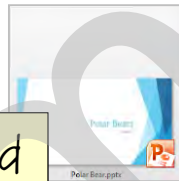
Watch the Polar Bear Presentation

- ☞ Double click on the *Animal* shortcut or find the *Animal* folder.



Animal

- ☞ Right click on the **polar bear** file and select Show.



Students view a completed sample of the project for inspiration and to stimulate their own ideas.



Questions about the Presentation

What is on the *habitat* slide?

map, information about where animal lives, information about the type of home

What is on the *appearance* slide?

**hand drawn picture of animal
the animal's appearance**

Students answer questions
after viewing the sample
presentation.

information about how

What is on the *food* slide?

clip art of food, facts about

What is on the *young* slide?

**picture of baby animal, facts about the young such as when they are born and the number of
cubs**

What is on the *threats* slide?

**picture of animal, facts about who can harm the animal, an idea for how to get rid of some of
the threats to help the animal**

What did you like about the presentation?

What would make the presentation even better?

Close PowerPoint 2013

Click Close.



Assignment 3: Just the Facts

Use Animal Fact Sheets, encyclopedias, books, or the Internet to research your animal.

Animal Class



1. What is the name of the animal?
2. What class is the animal?

Habitat



3. What is the animal's habitat? (e.g., den, nest, pond)
4. What does the animal do in its habitat?

Technokids projects often begin with a student planning sheet, storyboard, or organizer.

Appearance



5. What does the animal look like?
6. How does its appearance help it to live in its habitat?

Session 1 Extension Activity: Circle the Animal Class

Circle the animal class.



ant

insect

reptile

mammal



alligator

bird

amphibian

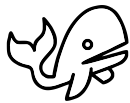
reptile



fly

Review activities at the end of sessions offer enrichment to check and reinforce newly learned skills.

amphibian



whale

insect



newt

insect

amphibian

mammal



turtle

reptile

bird

insect



bear

reptile

mammal

bird