

# **CHAPTER SUMMARIES BOOK 1**

## **Chapter 1: Be a Scientist**

<b>hypothesis</b>	<b>something that can change</b>
<b>variables</b>	<b>a statement that can be tested</b>
<b>communicate</b>	<b>share information</b>
<b>classify</b>	<b>put things in groups</b>

### **1. What do scientists do?**

- Scientists use many skills
- scientist make models
- scientists observe
- Scientists compare things-how do they look the same and different
- scientists classify things-put them into groups
- scientists measure
- scientists record data-write down what they observe
- Scientists INFER- use what you know to figure something out

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### **2. What do scientists do?**

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## **CHAPTER 2: A Look at Living Things**

<b>organism</b>	<b>living things</b>
<b>respond</b>	<b>how living things react</b>
<b>reproduce</b>	<b>make more of one's own kind</b>
<b>environment</b>	<b>all living and nonliving things that surround an organism</b>
<b>Cells</b>	<b>building blocks of life</b>
<b>Microscope</b>	<b>makes tiny things look larger</b>

### **What are living things?**

- living things:
- REPRODUCE,
- REMOVE WASTE,
- RESPOND
- TAKE IN NUTRIENTS
- NONLIVING THINGS do not do any of this

### **What do living things need?**

- food to get energy to live and grow
- water
- Animals need oxygen
- Plants need carbon dioxide
- Space- living things need space to grow

### **What are living things made of?**

- Living things are made of CELLS
- Cells are the building blocks of life

## **CHAPTER 2: A Look at Living Things**

### **Lesson 2: Plants and Their Parts**

<b>Structures</b>	<b>Parts</b>
<b>roots</b>	<b>structures that take in water and nutrients. Hold a plant in place</b>
<b>stem</b>	<b>holds up a plant</b>
<b>leaf</b>	<b>structure where plants make food</b>
<b>Photosynthesis</b>	<b>The process in which plants make food STUDY THE DIAGRAM ON PAGE 40</b>
<b>Chlorophyll</b>	<b>a substance inside a plant this makes leaves green</b>

#### **1. How are plants alike?**

- All plants can make their own food \_PHOTOSYNTHESIS
- most plants have the basic structure-roots, stem and leaves

#### **2. What are plants?**

- Plants are organisms that can make their own food

#### **3. How do roots and stems help plants?**

- Roots take in water and nutrients
- Stems hold a plant up

#### **4. Why are leaves important?**

- leaves are where a plant makes food
- Plants make food in a process called PHOTOSYNTHEIS
- PHOTOSYNTHESIS
  - sunlight goes into the leaves
  - carbon dioxide goes into the holes on leaves
  - Food made inside the leaves goes through the plant
  - Roots take in water and nutrients
  - oxygen flows out of the plant

#### **5. How can you classify plants?**

- plants are grouped by structures

## **CHAPTER 2: A Look at Living Things**

### **Lesson 3: Animals and Their Parts**

<b>lungs</b>	<b>structures that take in oxygen from the air</b>
<b>Gills</b>	<b>take in oxygen from water</b>
<b>shelter</b>	<b>safe place for animals</b>

#### **What are animals?**

- animals are living things
- animals have certain traits in common
- most animals can move- fly, run, jump, swim

#### **How do animals get what they need?**

- animals have structures that help them get what they need
- Some animals have long tongues for lapping water
- birds scoop up water in their beaks
- Elephants pick up water in their trunks
- These same structures help animals get food
- Some animals have gills or lungs for breathing oxygen
- Some animals breathe through their skin- Worms and Salamanders

#### **How do animals stay safe?**

- They stay in the ground
- Groundhogs dig holes
- Lizards flatten their bodies and crawl under rocks
- some animals live in trees
- Some animals have structures that protect their bodies- Porcupines have hard sharp quills

## **CHAPTER 2: A Look at Living Things**

### **Lesson 4: Classifying Animals**

<b>vertebrate</b>	
<b>invertebrate</b>	
<b>exoskeleton</b>	
<b>birds</b>	
<b>reptiles</b>	
<b>amphibians</b>	
<b>fish</b>	
<b>Mammals</b>	

#### **1. How can you classify animals?**

- animals can be classified as VETERBRATES- animals that have a backbone
- INVERTERBRATES- animals with no backbones
- Tigers, dogs gold fish are VETERBRATES
- insects' spiders' worms and jelly fish are INVERTRBRATES

#### **2. What are some invertebrates?**

- sponges
- worms
- sea stars
- urchins
- jellies
- Arthropods- insects' spiders and lobsters
- **Mollusks:**
- soft bodies
- some have hard shells
- clams, snails and octopuses

Invertebrates have no bones but they have an **EXOSKELETON- hard outer covering**

#### **3. What are some vertebrates?**

- birds
- reptiles-crocodiles, turtles, snakes
- Amphibians- frogs, toads and salamanders
- fish -they breathe through gills

#### **4. What are mammals?**

- mammals are vertebrates with hair or fur
- they are born alive
- they look after their young
- breathe with lungs

