

## SCIENCE GRADE 4 -Test prep

### Chapter 2 – Kingdoms of Life

#### **Cells**

- Which of these parts is only in plant cells?
  - Mitochondrion
  - Chloroplast
  - Cell membrane
  - Chromosome
- Most cells
  - Are shaped like boxes
  - Have tiny vacuoles
  - Do the same job
  - Are round

#### **Classifying Living Things**

- Which statement about the number of species is true?
  - Kingdoms contain the most.
  - A phylum contains the most.
  - Orders have the fewest.
  - Kingdoms have the fewest.
- All the organisms in this kingdom make their own food.
  - Fungi
  - Protists
  - Bacteria
  - Plants
- Which one is NOT a microorganism?
  - Archaea
  - Protist
  - Fern
  - Bacteria
- In some ways mushrooms are similar to plants. What makes mushrooms different from plants
  - Mushrooms cannot make their own food.
  - Mushrooms cannot reproduce
  - Mushrooms cells do not have cell walls.
  - Mushroom cells do not have a nucleus.
- What is true of all living things?
  - They have tissues.
  - They can move.
  - They use energy.
  - They change shape.
- Which of these do your cells contain?
  - Cell wall
  - Chlorophyll
  - Chloroplast
  - Cytoplasm
- The following chart shows how a lion is classified.
 

Phylum	Chordata
Mammalia	
Order	Carnivora
Family	Felidae
Genus	Panthera
Lion	

What words are missing in the chart? What do these words describe?

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- An important group used to classify living things is missing from this chart. What is it? How would you classify the lion in this group?
 

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### Chapter 3 – The Animal Kingdom

#### **Systems in animals**

- The stomach is part of which body system?
  - Digestive
  - Nervous
  - Skeletal
  - Circulatory
- The excretory system
  - take sin oxygen
  - supports the muscular system.
  - breaks down food.
  - gets rid of wastes

#### **Animal Life Cycles**

- Which animal’s metamorphosis has a pupa stage?
  - Frog
  - Damselfly
  - Butterfly
  - Grasshopper
- The hydra’s offspring will most likely have
  - None of the parent’s traits
  - Some of the parent’s traits
  - Half of the parent’s traits
  - All of the parent’s traits
- In animals, which system is responsible for communication within the body?
  - Respiratory system
  - Digestive system
  - Skeletal system
  - Nervous system

### Chapter 4 – Adaptations and Survival

#### **Change over time**

- Which results from organisms changing over time?
  - Changes in the environment
  - Diversity of species
  - Inherited traits
  - Mutations

#### **Animal Senses**

- Animals use their senses to help with
  - Finding food
  - Building homes
  - Growth
  - Using energy

#### **Plants adaptation with their surroundings**

- Which word describes a plant’s response to its environment?
  - Tropical
  - Tropism
  - Gravity
  - Stimulus

#### **Changes in ecosystems**

- Which of these are natural events that change ecosystems?
  - Flood, pollution, deforestation
  - Earthquake, overpopulation, fire
  - Hurricane, flood, landslide
  - Farming, recycling, overpopulation
- In a northern region, the population of a type of goose varies in the course of a year. What most likely explains this variation?
  - Extinction
  - Hibernation
  - Accommodation
  - Migration
- Porcupines have long, sharp hairs called quills. What is the main function of the quills on the porcupine?
  - To find shelter
  - To stay cool
  - To find food
  - To protect itself
- Which of the following is an example of camouflage?
  - A desert fox has large ears.
  - A bird’s colour matches its surroundings.
  - A camel closes its nostrils to keep out sand.
  - A chipmunk sleeps for most of the winter
- A squirrel is born with white fur instead of the normal gray fur colour. How would environmental conditions have to change to increase this squirrel’s chance of survival?
  - A city dump is built nearby.
  - Volcanic ash covers the forest.
  - The climate gets cold enough to snow.
  - An earthquake causes a landslide.
- An environment suddenly becomes colder. Which adaptation would most likely give some animals a better chance of survival than others?
  - Long tails
  - Long ears
  - Small eyes
  - Thick fur coats
- Which human activity most likely has a negative impact on the environment?
  - Recycling notebook paper
  - Conserving resources
  - Releasing waste into a river
  - Creating compost piles
- The data table below shows the population of four different species of snails.
 

Snail Population Sizes				
	Year 1995	Year 2005	Year 2015	
Species 1	2,000	2,500	2,300	
Species 2	2,000	300	1,200	
Species 3	2,000	2,700	3,400	
Species 4	2,000	700	100	

Which species will most likely go extinct?

  - Species 1
  - Species 2
  - Species 3
  - Species 4
- A law is passed to protect endangered species. What is the law expected to do?
  - Make organisms extinct
  - Make organisms endangered
  - Allow more pollution
  - Prevent organisms from becoming extinct

Answer the following questions.  
A student made this table for her science class.

	?	
Monarch butterfly	Migration	
Northern black bear	Hibernation	
A	Mimicry	
cactus	B	

- What would be a good heading for her table?
 

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- Complete A and B in the table above.

- If there were another row, what two items could you place in the table? Explain.
 

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### The Health of Living Things

#### **Choosing Healthful Foods**

- The grains group are made mostly of
  - Proteins
  - Starches
  - Fats and oils
  - Vitamins and minerals
- A balanced diet includes foods from
  - Milk and meat groups only.
  - Milk and grain products only.
  - Any three food groups.
  - All food groups.
- How could you increase your physical fitness?
  - Eat food high in sugar
  - Practice good hygiene
  - Eat a balanced diet
  - Exercise daily
- Which two foods should make up most of a sample meal?
  - Pasta and Broccoli
  - Chicken and Eggs
  - Milk and Apples
  - Chips and Cookies

#### **Staying Healthy, Fit and Safe**

- Look at the table below. Circle the row that shows the most balanced diet.
 

	Breakfast	Lunch	Dinner
A	eggs and hash browns	beef sandwich, potato chips	beef burger and cake
B	oatmeal, eggs, melon	beef sandwich, carrots, milk	chicken and noodles, peas
C	cereal and donut	pizza	pizza
D	fruit cup	carrots, banana, green beans	salad and apple

- How does good hygiene help keep you healthy?
  - It helps you feel good about yourself.
  - It improves your appearance.
  - It stops germs from spreading.
  - It is part of a balanced diet.

- Nasser wants to lose weight and become more physically fit. Which is the best plan for him to follow?
  - Stop eating proteins, fats and oils.
  - Eat a balanced diet that is low in fat and exercise regularly.
  - Exercise several times per day and eat more fats.
  - Eat only fruits and vegetables and exercise regularly.

- How do healthful foods affect your body?
  - They make your body stronger.
  - They make you sick.
  - They help you lose weight.
  - They spread germs.

- Why is sleep important to good health?
  - It helps your body digest food.
  - It strengthens your muscles.
  - It stops germs from spreading
  - It gives your body time to repair.

- Rashid wants to strengthen his muscles for the city track and field competition. Which should he eat to help with muscle growth?
  - Food rich in fats
  - Food rich in proteins
  - Food rich in carbohydrates
  - Food rich in calcium

- Why is regular exercise an important health habit?
  - It helps your body repair itself.
  - It keeps the body working at its best.
  - It helps your body digest food.
  - It gives you more energy.

- The table below shows Maryam’s plan to improve her health habits.
 

Health Habit	Way to improve
Avoiding harmful substances	Continue to avoid harmful substances
Personal cleanliness	Wash hands more often
Balanced diet	Eat more fruits and vegetables
Regular exercise	
rest	Get at least 9 hours of sleep per night

- Which should she add to the blank space to complete her list?
  - Brush hair daily
  - Brush teeth twice a day
  - Exercise every day
  - Exercise once a week

- Look at the table below.
 

Vitamin or Mineral	Function
Vitamin A	Maintains eye, gum and skin health
Vitamin C	Maintains blood, bone, teeth and gum health
Calcium	Build teeth and bones
Iron	Keeps red blood cells functioning

- What might happen if your diet does not include enough calcium?
  - Your bones and teeth will become weak.
  - Your body will function normally.
  - Your vision will decline.
  - Your energy will decline.

- Which is part of good hygiene?
  - Eating a balanced diet
  - Washing hands after using the restroom
  - Getting plenty of rest
  - Exercising daily

- Summarise five good health habits you practice regularly. Name one way you could improve your health habits.
 

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