



SCIENCE 3

WEEK 5

SCHEDULE

Date:	Day 1 ²¹	Day 2 ²²	Day 3 ²³	Day 4 ²⁴	Day 5 ²⁵
<i>Mysteries and Marvels of Nature</i>	pp. 122–123	pp. 12–13	pp. 24–25; 36–37	pp. 48–49; 60–61	
Activity Sheet Questions	#1–7	#8–12	#13–20	#21–26	
<i>The Usborne Science Encyclopedia</i>					pp. 18–21
Activity Sheet Questions					#27–38
<i>Incredible Creatures That Defy Evolution I (DVD)</i>			Woodpecker (track IV)		
Optional: Do Together	See No Evil			Staying Safe	

Other Notes

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Optional: Do Together

Day 1: See No Evil

Too often, we take for granted all five of our senses and how they work together to produce the experience that we daily call “life.” Only when one of those senses is compromised do we realize how important it is.

Today, talk with your children about their five senses. What would it be like if they could not see? Hear? Feel? Smell? Taste? What would it be like to live in a dark hole underground like a mole?

Have them try out what it would be like to live for a while without sight. Blindfold them with a headband or kerchief, and then ask them to identify various things, using only their ears, hands, nose, or tongue. Feel free to use foods (cold spaghetti, grapes), everyday objects (remote control, fork), as well as some strange objects they’re not used to interacting with everyday (go to the garage for items such as a broom or an oil pan).

Day 4: Staying Safe

As your children’s book notes, the jack snipe uses the stripes on its body to help it hide in its native marshlands. (I guess that explains why snipe hunting can be so difficult!)

Discuss with your children how other animals native to your area stay safe. Near our home, there are many deer that roam the woods. Their brown coats almost perfectly match the hues of the trees around them, making them very hard to spot as they tiptoe through the forest. What other examples can your children think of?

Now ask them to think about how they might disguise themselves from animals. Do you know anyone who hunts regularly? Ask them about the strategies they use to blend into their surroundings when they hunt. ■



Week 5 Activity Sheets

Mysteries and Marvels of Nature

1. **True or False?** All mammals breathe air, except for the ones that live in the ocean. (p. 122)
- True** **False**
- If false, make the statement true.
(Possible: All mammals breathe air, even the ones that live in the ocean.)
2. Tarsiers have _____ that help them hunt at night. (Circle the answer.) (p. 123)
- large eyes** **good friends**
flashlights **bright colors**
3. How do dolphins sleep without drowning if they are air-breathing mammals that live under water? (p. 122)
(Dolphins only sleep with half of their brains at a time. The other half regulates breathing.)
4. List 5 characteristics of mammals. (Review) (pp. 14–122)
- 1) All mammals have _____ (fur) or _____ (hair)
- 2) Mammals take care of their _____ (babies/young)
- 3) Mammals feed their babies _____ (milk)
- 4) Mammals' bodies stay at the same temperature unlike reptiles who must lay in the sun to get warm. This means mammals are _____ (warm-blooded)
- 5) All mammals breathe _____ (air)
- 
- 
- 
- 
- 
- 



Week 5 Activity Sheets

5. Draw a picture of your favorite mammal, then tell Mom or Dad why you chose that mammal.
6. Match the correct animal to the way it escapes its enemies. (Review) (pp. 50–123)
- | | | |
|---|-----------|----------------------------------|
|  | opossum | sprays bad smelling stuff |
|  | skunk | has secret entrance to home |
|  | armadillo | plays dead |
|  | beaver | striped coat provides camouflage |
|  | zebra | rolls into a ball |

Week 5 Activity Sheets

7. Solve the riddles with mammals studied in your book. (pp. 15–122)
- I grow up in my mother's pouch.
I am called a joey.
What am I?

(a wallaby or kangaroo)

I am a mammal that lays eggs.
My babies like the milk that
oozes from my skin.
I have webbed feet and a bill.
What am I?

(a platypus)

I sleep with one eye open and help
fishermen in Myanmar catch fish.
What am I?

(a dolphin)



I use two flaps of skin between my front and back legs to parachute from tree to tree.
What am I?

(a sugar glider)



8. Circle two body parts birds use to catch food. (p. 12)

(beaks and feet)



9. List three techniques birds use to catch prey. (pp. 12–13)

1) (possible answers: speed)

2) (acrobatic skill)

3) (keen eyesight; stealth; cunning; bait)

10. Which birds work in teams to fish? (p. 12) (pelicans)



Week 5 Activity Sheets

11. Use the word bank to complete the sentences about owls. (p. 13)

Owls have a very strong sense of (hearing). Even though their (ears) are on the sides of their heads, they face to the (front) and dish shapes on their faces help channel sounds.

hearing

ears

front

12. Birds use their beaks to collect food. Match the following beaks to the correct function. (pp. 12–13)



pelican



green heron



owl

tear food apart

scoop up fish

spear fish on pointed end

13. All birds have _____ (p. 24)

wings

thumbs

babies that drink milk

webbed feet



14. **True or False?** All birds fly. (p. 24)

True

False



15. What do large birds do to help them take off? (p. 24)

(run)

16. Why do they run into the wind? (p. 24)



(by running into the wind, they increase the flow of air over their wings, which helps lift them into the air.)

Week 5 Activity Sheets

17. Although penguins do not fly, they can still get around very quickly. List two ways penguins travel. (p. 25)

- 1) _____
2) _____

18. What two types of territories do birds fight over? (p. 36)

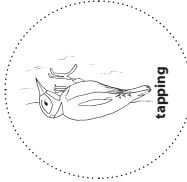
- 1) _____
2) _____

Challenge! Why do you think birds defend these territories?
(to breed successfully, birds need a safe place to build their nests,
freedom from disturbances, and a good supply of food)

19. Why do some birds nest in huge colonies even though they are territorial? (p. 37)
(because there is greater protection from predators in numbers.)



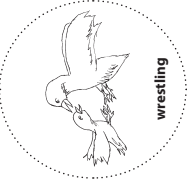
20. Circle ways birds keep others away from their territory. (pp. 36-37)



tapping



eating all the food



wrestling



bribing them with fish



singing



bring them flowers

Week 5 Activity Sheets

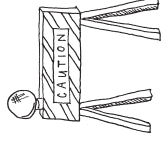
21. Use the word bank to write the bird's name under the picture that shows how it stays safe. (pp. 48-49)

Parrigan	Black Skimmer Chick	Jack Snipe	Fulmar Chick
speckled to blend in with sand (Black Skimmer Chick)	feathers change color with seasons (Parrigan)	blends in with grass (Jack Snipe)	spits smelly orange substance (Fulmar Chick)

22. When a bird spits an orange substance at an attacker, how does the substance damage the attacking bird? (p. 49)
(the orange substance destroys the waterproofing on the attacking bird's feathers)

23. **True or False?** Birds are helpful creatures and will always help out other animals. (pp. 60-61)

False



24. How does a bee-eater warn a kori bustard of danger? (p. 60)

- ☐ squawks loudly
☐ hops up and down
☒ flies away
☐ plucks at the kori's feathers

25. A honey guide bird helps a honey badger by: (p. 61)
(leading the honey badger to honey)

A honey badger helps a honey guide bird by:
(ripping open the bee's nest and leaving behind wax, bee larvae, and some honey for the bird)



Week 5 Activity Sheets

26. When is the red-billed oxpecker not helpful? (p. 61)
(because an oxpecker enjoys eating animal blood and will nibble at a wound so it takes longer for the wound to heal)

The Usborne Science Encyclopedia

Optional

27. Give a mini-speech to someone explaining how conduction, convection, and radiation work.
 (Lines provided for dictation.) (pp. 14–18)
(Answers will vary. Possible: Heat moves through solids by conduction. Heat travels through a room through convection, as the heated air itself moves. Heat moving in invisible straight lines without the aid of particles to carry it is called radiation.)

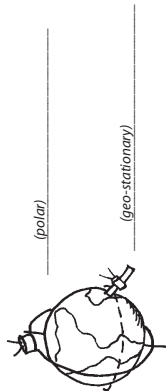
28. An insulator is a poor conductor of heat.
 A conductor allows heat to travel quickly. (pp. 14–18)
29. Why does metal feel cold when you touch it? (p. 14)
(because the heat from your hand escapes into the metal—it's not actually the metal that is cold, it's your hand that is losing heat!)

30. Write the correct letter in the blank provided. Answers may be used more than once. (pp. 14–18)
- | | | |
|-------------------------------|--|---------------------------------|
| A) conduction | B) convection | C) radiation |
| (C) broiler | (B) a mirage | (B) ashes rising from a bonfire |
| (B) thermals that gliders use | (C) a sunburn | (B) room heating |
| (A) a saucepan on a stove | (B) water boiling in a pan | (B) wind currents |
| | (C) a burglar alarm that uses infra-red rays | |

31. People who study weather are called meteorologists. (p. 19)

Week 5 Activity Sheets

32. Label the polar satellite and the geo-stationary satellites. (p. 19)



- a. Which satellite moves? (p. 19)
- b. For the satellite that moves, what does it pass on each orbit? (p. 19)

the sun **the space station** **the North and South Poles** **Paris**

- c. **Challenge:** How does the stationary satellite stay in one place? (p. 19)
(it spins at the same speed that the earth does)



33. How do plants get food? (pp. 20–21) *(they make it from light and carbon dioxide)*

34. Use the words in the box to complete the sentences. (p. 21)

photosynthesis	chlorophyll	respiration
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- a. The green chemical that helps plants use sunlight to make food is called chlorophyll.
- b. The process of changing food into energy is respiration.
- c. The process by which plants make their own food is called photosynthesis.

35. What seven things does the body need from food? (Fill in the missing letters.) (pp. 20–21)
- 1) w a t e r 2) v i t a m i n s 3) p r o t e i n s
 4) m i n e r a l s 5) r o u g h a g e 6) c a r b o h y d r a t e s
 7) f a t s

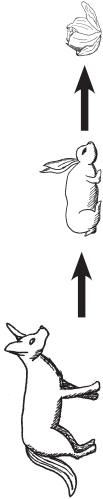


Week 5 Activity Sheets

36. Is this a food chain or a food web? (Circle one.) (pp. 20-21)

food chain

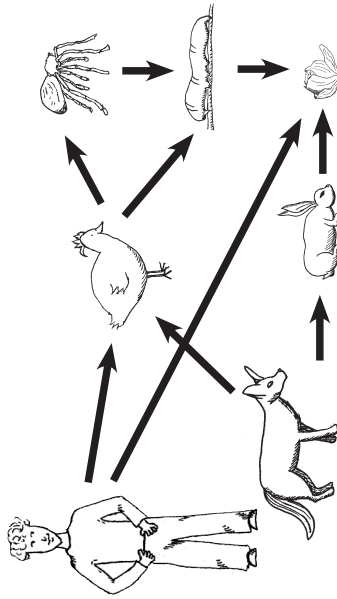
food web



37. Is this a food chain or a food web? (p. 21)

food chain

food web



38. What is transferred from one creature to the next in either a food chain or a food web? (pp. 20-21)

food

cells

water

energy



Mysteries and Marvels of Nature

1. **True or False?** All mammals breathe air, except for the ones that live in the ocean. (p. 122)

True

False

If false, make the statement true.



2. Tarsiers have _____ that help them hunt at night. (Circle the answer.) (p. 123)

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3) Mammals feed their babies _____.

4) Mammals' bodies stay at the same temperature unlike reptiles who must lay in the sun to get warm. This means mammals are _____.

5) All mammals breathe _____.





Week 5 Activity Sheets

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opossum •

- sprays bad smelling stuff



skunk •

- has secret entrance to home



armadillo •

- plays dead



beaver •

- striped coat provides camouflage



zebra •

- rolls into a ball



7. Solve the riddles with mammals studied in your book. (pp. 15–122)

I grow up in my mother's pouch.
I am called a joey.
What am I?

I am a mammal that lays eggs.
My babies like the milk that
oozes from my skin.
I have webbed feet and a bill.
What am I?

I sleep with one eye open and help
fishermen in Myanmar catch fish.
What am I?

I am the fastest land animal.
What am I?

Though I look white,
my fur is clear and my skin is black,
which helps me to stay warm.
What am I?

My tongue is longer than an
anteater's, and I'm designed
to reach parts of a tree that
other animals can't.
What am I?

I have bold black and white stripes
that blur in the heat haze
of the African plain.
What am I?

I have the biggest antlers of
all deer. They fall off after mating
season.
What am I?

I build a lodge in the middle
of a lake.
What am I?

I use two flaps of skin between my front and back legs to parachute from tree to tree.
What am I?



8. Circle two body parts birds use to catch food. (p. 12)



9. List three techniques birds use to catch prey. (pp. 12–13)

- 1) _____
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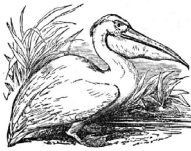
hearing

ears

front

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pelican •

• tear food apart



green heron •

• scoop up fish



owl •

• spear fish on pointed end

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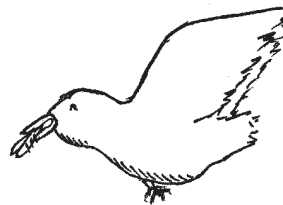
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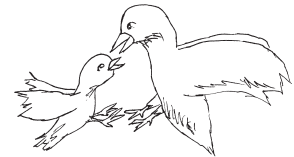
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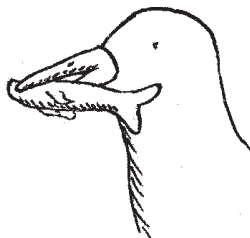
tapping



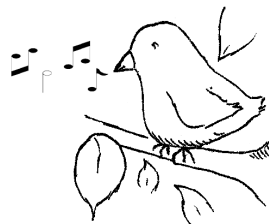
eating all the food



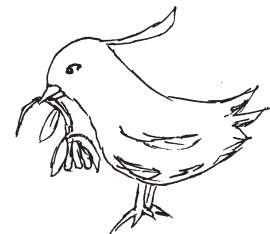
wrestling



bribing them with fish



singing



bring them flowers



Week 5 Activity Sheets

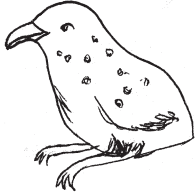
21. Use the word bank to write the bird's name under the picture that shows how it stays safe. (pp. 48–49)

Ptarmigan

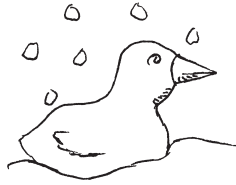
Black Skimmer Chick

Jack Snipe

Fulmar Chick



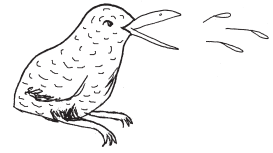
speckled to blend in
with sand



feathers change color
with seasons



blends in with grass



spits smelly orange
substance

22. When a bird spits an orange substance at an attacker, how does the substance damage the attacking bird? (p. 49)

23. **True or False?** Birds are helpful creatures and will always help out other animals. (pp. 60–61)

True

False

24. How does a bee-eater warn a kori bustard of danger? (p. 60)

☐

squawks loudly

☐

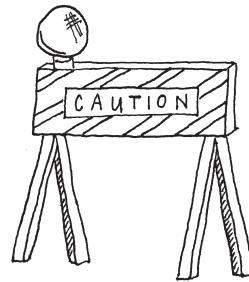
hops up and down

☐

flies away

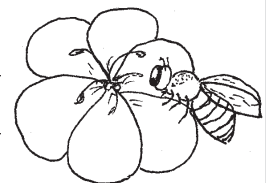
☐

plucks at the kori's feathers



25. A honey guide bird helps a honey badger by: (p. 61)

A honey badger helps a honey guide bird by:





26. When is the red-billed oxpecker not helpful? (p. 61)

The Usborne Science Encyclopedia

Optional

27. Give a mini-speech to someone explaining how conduction, convection, and radiation work.

(Lines provided for dictation.) (pp. 14–18)

28. An _____ is a poor conductor of heat.

A _____ allows heat to travel quickly. (pp. 14–18)

29. Why does metal feel cold when you touch it? (p. 14)

30. Write the correct letter in the blank provided. Answers may be used more than once. (pp.14–18)

A) conduction

B) convection

C) radiation

_____ broiler

_____ a mirage

_____ ashes rising from a bonfire

_____ thermals that gliders use

_____ a sunburn

_____ room heating

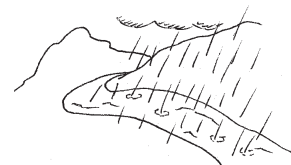
_____ a saucepan on a stove

_____ water boiling in a pan

_____ wind currents

_____ a burglar alarm that uses infra-red rays

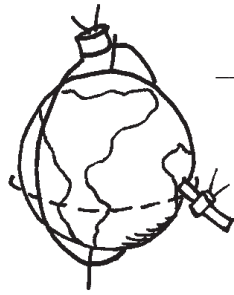
31. People who study weather are called _____. (p. 19)





Week 5 Activity Sheets

32. Label the polar satellite and the geo-stationary satellites. (p. 19)



a. Which satellite moves? (p. 19)

polar

geostationary

b. For the satellite that moves, what does it pass on each orbit? (p. 19)

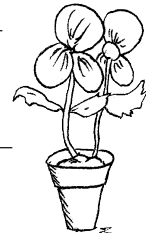
the sun

the space station

the North and South Poles

Paris

c. **Challenge:** How does the stationary satellite stay in one place? (p. 19)



33. How do plants get food? (pp. 20–21) _____

34. Use the words in the box to complete the sentences. (p. 21)

photosynthesis

chlorophyll

respiration

a. The green chemical that helps plants use sunlight to make food is called _____.

b. The process of changing food into energy is _____.

c. The process by which plants make their own food is called _____.

35. What seven things does the body need from food? (Fill in the missing letters.) (pp. 20–21)

1) w _ _ _ _

2) v _ _ a _ i _ _

3) _ r _ _ _ _ n _

4) _ i _ _ _ _ s

5) _ _ _ g h _ _ _

6) c a _ _ _ h _ _ _ _ t _ _

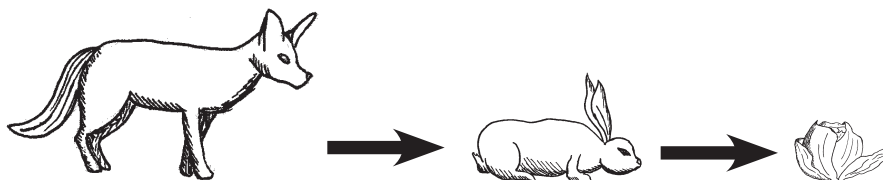
7) _ a _ s



36. Is this a food chain or a food web? (Circle one.) (pp. 20–21)

food chain

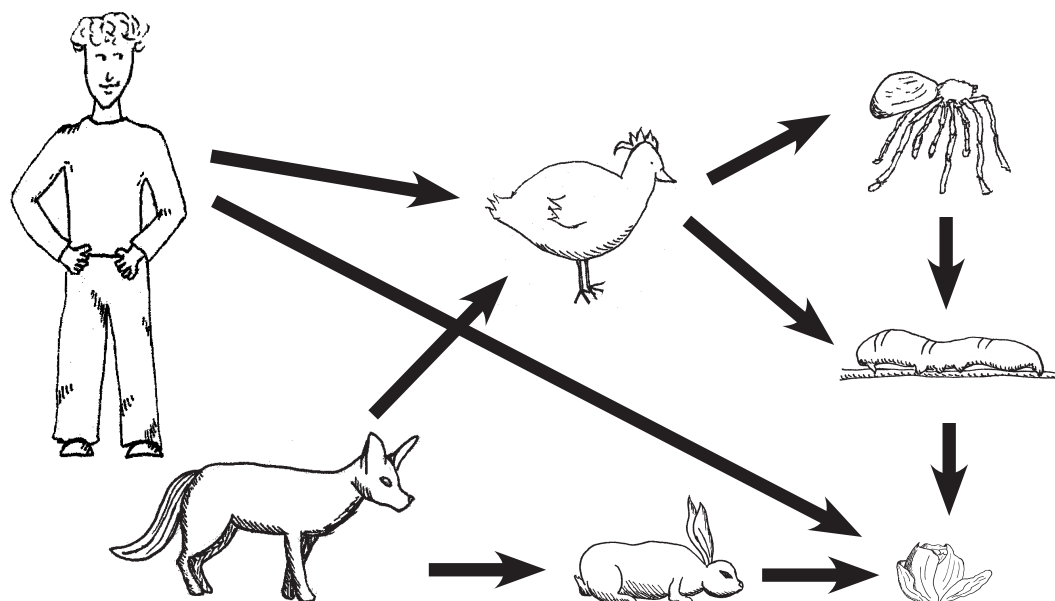
food web



37. Is this a food chain or a food web? (p. 21)

food chain

food web



38. What is transferred from one creature to the next in either a food chain or a food web? (pp. 20-21)

food

cells

water

energy

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