



SCIENCE C **WEEK 1** **SCHEDULE**

Date:	Day 1 ¹	Day 2 ²	Day 3 ³	Day 4 ⁴	Day 5 ⁵
The Usborne Book of Knowledge	pp. 52–53	pp. 54–55	pp. 56–57	pp. 58–59	
Activity Sheet Questions	#1–2	#3–4	#5–6	#7–8	
5-Day: The Usborne Book of Knowledge					pp. 60–61
5-Day: Activity Sheet Questions					#9–10
Optional: Do Together	Monkey Bars		Mocha Bear		

Other Notes

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Day 1

The Usborne Book of Knowledge | pp. 52–53

Are you or your children bothered by the phrase stating that chimpanzees “are the animals most like people”? It probably depends on what is meant. While the section is not explicit in stating that humans have evolved from apes, which is a typical macroevolutionary assumption, it does suggest the connection.

But in looking at any data or information, scientists (and non-scientists) must be careful in how the information is evaluated. What explanation makes the most sense? Are there reasonable alternative explanations? Simply because some animals are similar in structure (homogeny) does not necessarily mean that the animals in question evolved rather than being created and designed. Doesn't it make sense that things with the same designer will sometimes show similar structures? If this is the case, then the fact that apes look somewhat like humans can be explained by saying that since God created all creatures, there are bound to be some similarities.

But there are also significant differences that clearly separate humans from apes. Human beings are creative, sophisticated, communicating creatures with, for example, great intelligence, artistic sensibilities, broad emotions, critical thinking abilities, and religious tendencies. Clearly, we're vastly different from apes in many important respects. [p. 52]

Activity Sheet Questions | #1–2

Find the Activity Sheets after the notes. They are assigned on each schedule page. Each Activity Sheet has a corresponding Answer Key page following these schedule pages.

You do not have to do every question on the Activity Sheets. Feel free to adjust and/or omit activities to meet the needs of your children. We cover the same concepts repeatedly throughout the year (and years to come!) to enable students to learn “naturally” through repetition and practice over time.

Please don't expect your children to write the answers until they gain considerable proficiency at handwriting. We have provided a variety of activities to interest and challenge your children. Feel free to let your children do those activities that they enjoy and simply talk through others.

We have provided space for you to fill in answers as your children responds verbally, or simply check off the items that you discuss.

Remember: this program is designed for you to use to meet your children's needs. It is not meant to use you!

Suggestion: your Activity Sheets might work more easily in a small binder for your children to keep and use as assigned. If you have more than one child using this program, extra Activity Sheets can be purchased for each child (Item #CSG1).

Optional: Do Together | Monkey Bars

Do you have a playground with monkey bars nearby? If so, take your children for some play time. Help them swing on the monkey bars. Explain that monkey bars got their name because you have to swing from rung to rung just like a monkey (or an ape or a chimpanzee) swings from branch to branch in the jungle. If you can't get to a playground with monkey bars, you can help them swing like a monkey from the branches of a tree at home. As you enjoy your time playing together, talk about what they've learned so far about apes and chimpanzees. Would they ever want one as a pet? Why or why not? Have fun engaging in a little monkey business.

Day 2

The Usborne Book of Knowledge | pp. 54–55

While the book is correct in noting that giraffes appear awkward when they need to take a drink, it fails to point out that the mechanisms involved in this process are pretty amazing. Why doesn't the blood rush to a giraffe's head and cause a hemorrhage when it takes a drink? Because special valves in the giraffe's head regulate the pressure. There are other interesting things at work inside a giraffe taking a drink, too, such as the need for a powerful heart and special tissue near the brain. To find out more about how incredible it is when a giraffe takes a drink, see the article, “Do drinking giraffes have headaches?” which can be found on our IG links web page [IG](#). [p. 54]

Activity Sheet Questions | #3–4

Day 3

The Usborne Book of Knowledge | pp. 56–57

Activity Sheet Questions | #5–6

Optional: Do Together | Mocha Bear

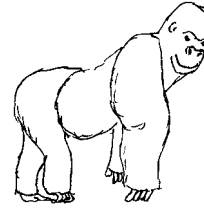
Help your children create a neat brown bear art project suitable for hanging on the refrigerator. All you'll need is the following: paper, crayons or markers, glue, and coffee grounds. Start with a blank piece of paper and draw the shape of a brown bear on it. If you can't draw very well, feel free to print a picture of a brown bear from the



The Usborne Book of Knowledge

1. Label each animal as an **ape** or a **monkey**. (p. 52)





2. How do chimps use tools? (p. 53)

3. Giraffes can run for long distances. (p. 54)

True

False

4. How do the following characteristics help giraffes survive? (pp. 54-55)

long neck: _____

heavy hooves: _____

long tongue: _____

5. Where do bears live? Circle all that apply. (pp. 56-57)

Asia

Europe

South America

Africa

North America

Australia

Hawaii

Antarctica

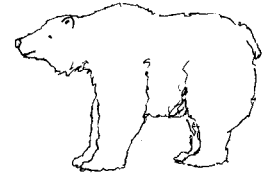
The Arctic



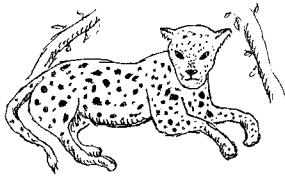
Week 1 Activity Sheets

6. Describe three ways bears obtain food. (pp. 56-57)

- 1) _____
- 2) _____
- 3) _____



7. Circle the biggest cat in the world. (p. 58)



leopard



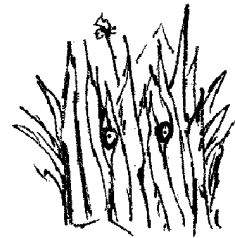
tiger



cat

8. Why is a tiger's coat good camouflage? (p. 58)

- _____
- _____



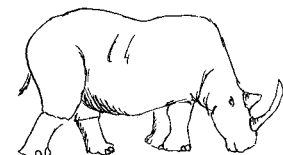
5-Day: The Usborne Book of Knowledge

9. Why is the white rhino's neck longer than the black rhino's? (Hint: Think about what they eat.)

- (p. 60) _____
- _____

10. Why do rhinos wallow in the mud? Give two reasons. (p. 60)

- 1) _____
- 2) _____





SCIENCE C **WEEK 18** **SCHEDULE**

Date:	Day 1 ⁸⁶	Day 2 ⁸⁷	Day 3 ⁸⁸	Day 4 ⁸⁹	Day 5 ⁹⁰
Weather	pp. 10–11	pp. 12–13	pp. 14–15		
Activity Sheet Questions	#1–2	#3	#4		
5-Day: <i>The Usborne Book of Knowledge</i>					pp. 200–201
5-Day: Activity Sheet Questions					#5–6
Discover & Do Level 2 DVD				Tracks #58–60	
Optional: Do Together	Cloud in a Bottle		Cloud Craft		
Science Activities, Vol. 3				"Water in the Air" pp. 52–53	
Supplies	We provide: CSG—chalk. You provide: full can of drink (refrigerated).				
Shopping/Planning List	For next week: bowl of hot water, plastic wrap, ice cubes.				

Other Notes

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Day 1

Weather | pp. 10–11

Activity Sheet Questions | #1–2

Optional: Do Together | Cloud in a Bottle

Help your children make a cloud in a bottle today! All you'll need is a clear plastic 2-liter pop bottle, some matches, and warm water. Fill the 2-liter bottle one-third full of warm water and put the cap on. As warm water evaporates, it adds water vapor to the air inside the bottle—the first ingredient to make a cloud! Squeeze and release the bottle. Then take the cap off the bottle. Light a match, hold it near the opening of the bottle, drop it in the bottle, and then quickly put on the cap to trap the smoke inside. Smoke (or dust or other particles in the air) is the second ingredient to make a cloud! Now, slowly squeeze the bottle hard and release. The third ingredient to form a cloud is a drop in air pressure. A cloud should appear when you release and disappear when you squeeze. You've just created a cloud!

Day 2

Weather | pp. 12–13

Activity Sheet Questions | #3

Day 3

Weather | pp. 14–15

Activity Sheet Questions | #4

Optional: Do Together | Cloud Craft

Using construction paper, cotton balls, glue, and crayons or colored pencils, have your children create a sky scene. And, yes, their sky should be cloudy! Challenge them to use the glue and cotton balls to create different types of clouds. Then have them use the crayons or colored pencils to label their clouds. Compare their creation to pictures in their book or on the Internet. How did they do? Could you identify the types of clouds they created?

Day 4

Discover & Do Level 2 DVD | Tracks #58–60

Science Activities, Volume 3 | "Water in the Air"
pp. 52–53

Day 5

5-Day: The Usborne Book of Knowledge | pp. 200–201

The development of commercial flight has not changed the size of our world, but it has resulted in some significant changes, particularly in the speed with which we can reach far areas of the earth that once may have taken months to traverse. Air transportation also allows us to ship items quickly, resulting in next day delivery options. Flight technology has also extended to military purposes. It's important for your children to realize, if only a little at this stage, that science and technology often have far-reaching consequences. This general concept may be applied to many of the remaining technologies and inventions covered in the remainder of the book such as automobiles, bicycles, photography, and more.

Activity Sheet Questions | #5–6 ■

Week 18 Activity Sheets

Weather

1. Draw a line to label each type of cloud. (pp. 10-11)

stratus cirrus cumulus		(gray sky, a layer of clouds) (high, wispy and feathery)
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2. **Cloud Log:** Three times today, go outside and look at the sky. Record the kind of clouds you see above you in the three spaces below. Use the pictures in your book to help you. (pp. 10-11)

The first time: (Answers will vary. You may want to accompany your

The second time: children during their observations to help them make accurate determinations

The third time: of cloud shapes.)

3. Why does it make sense that clouds that are bumpy on the bottom signal that tornados are on the way? (p. 13) (Hint: What causes the bumps?)

(the bumps are formed by downdrafts of air, and a tornado is a long

finger of twisting air that reaches down to Earth from the clouds)

Geology, Meteorology, and Mechanical Technology | Week 18 | Student Activity Sheets **47**

Week 18 Activity Sheets

4. Match the name of each kind of fog to the way it is made. (pp. 14-15)

advection fog mountain mist radiation fog	when the ground loses heat and gets very cold, it cools the air above it, which makes the water vapor condense into fine droplets when warm, damp air blows over cold land or water, the moisture in the air turns into fog moisture given off by trees turns into fog during the night and settles into the valleys
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5-Day: The Osburne Book of Knowledge

5. Why can't people fly without equipment? (p. 200)

because our bodies are too heavy and we're not strong enough to flap big wings

because flying is too dangerous without equipment

because it is more exciting to fly in an airplane

6. **Challenge:** Do you think the world wars helped to speed up the development of airplanes? Why or why not? (pp. 200-201)

(Possible: Yes—once fighting power began using airplanes in battle, it quickly became clear what an advantage they were. They could shoot at or bomb enemies on the ground and only be within the enemy's firing range for a short time as they flew over. The only way for the enemy to retaliate was to develop their own planes. As air battles continued, the enemy who had the faster, more nimble, sturdier, and safer planes would win more battles. So out of necessity in war, aviation advancement leapt forward.)

48 Student Activity Sheets | Week 18 | Geology, Meteorology, and Mechanical Technology



Weather

1. Draw a line to label each type of cloud. (pp. 10-11)

stratus •



cirrus •



(gray sky, a layer of clouds)

cumulus •



(high, wispy and feathery)

2. **Cloud Log:** Three times today, go outside and look at the sky. Record the kind of clouds you see above you in the three spaces below. Use the pictures in your book to help you. (pp. 10-11)



The first time: _____

The second time: _____

The third time: _____

3. Why does it make sense that clouds that are bumpy on the bottom signal that tornados are on the way? (p. 13) (Hint: What causes the bumps?)





SCIENCE C **WEEK 36** **SCHEDULE**

Date:	Day 1 <small>176</small>	Day 2 <small>177</small>	Day 3 <small>178</small>	Day 4 <small>179</small>	Day 5 <small>180</small>
Dinosaurs Unleashed	pp. 64–69	pp. 70–76	pp. 77–83	pp. 84–92	
Activity Sheet Questions	#1–2	#3–5	#6–8	#9–11	
5-Day: The Usborne Book of Knowledge					pp. 236–237
Optional: Do Together				Favorite Activity	

Other Notes

You're All Done!

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Day 1

Dinosaurs Unleashed | pp. 64–69

What can be gleaned from the modern find of a coelacanth, thought to have been extinct for millions of years? Well, for one it demonstrates that science isn't perfect. It also shows us that the ocean is a big place and, as a result, we really don't know about everything that is in it. The find also demonstrates that if clear evidence to a scientific position is found that contradicts it, science needs to do the right thing and revise its theories. Isn't it also interesting that the coelacanths found today show no significant changes despite supposedly millions of years of opportunity to evolve? Did evolution decide somehow that the coelacanth was perfect and no longer needed to evolve? Incidentally, today proponents of what is termed Intelligent Design are claiming the evidence against macroevolution is continuing to grow to the point where either the theory of evolution will need to be significantly revised or even discarded in favor of another solution to the question of origins. If science is to remain true science, it needs to be open to correction and no theory can become unfalsifiable. [pp. 64–65]

Does the Bible include descriptions of dinosaurs? From a young-earth creationist position, this claim makes sense. If, after all, dinosaurs and humans coexisted, it's not out of the realm of possibility that the Bible would mention these enormous creatures. But from old-earth perspectives, whether theistic or non-theistic, the claim doesn't make sense. So, who's right? We're not going to tell you! Instead, we'll leave it for you and your children to discover. What makes the most sense? Are the biblical passages cited in the book convincing? What other options are available to explain the passages brought up? If you really want to dig into this, you might wish to consult some Bible commentaries, where you'll find the various animals cited in the passages in the book, including behemoth and leviathan, explained as crocodiles, whales, hippos, elephants, rhinos, dinosaurs, mythical creatures, poetic language, and more. As far as the reality of dinosaurs is concerned, however, one would hope all Christians would agree that God is a grand Creator and Designer and He is indeed responsible for the amazing creatures we call dinosaurs. [pp. 66–67]

Does this conclusion follow logically? "In fact, the description of this creature [leviathan] does not fit that of any known animal present in the world today. Thus, it must be

some type of extinct creature." Not necessarily. The logical fallacy (error) of the false alternatives limits the options when, in fact, there might be other reasonable options to look at. First, some may argue that leviathan is indeed a crocodile, despite claims against this position. Second, the creature may be extinct, but not a dinosaur. Third, perhaps the author is using poetic language. Fourth, maybe a mythical creature is being discussed. We're not saying we agree with any of these alternatives, only that there are alternatives. To say, "it must be some type of extinct creature" does not necessarily follow.

Also, let's not overlook the broader context of the Job 41 passage. The emphasis is on God and His glory and power, and our comparative weakness, not on the leviathan. The creature, whatever it may be, is secondary and is merely used as an example to show the greatness of God, as well as demonstrate the weakness of human beings when compared to the Lord and His powerful creations. [pp. 68–69]

Activity Sheet Questions | #1–2

Day 2

Dinosaurs Unleashed | pp. 70–76

Do amazing creatures like those mentioned on pages 70–71 testify to the reality of God? According to Romans 1:20 they do: "For since the creation of the world God's invisible qualities—his eternal power and divine nature—have been clearly seen, being understood from what has been made, so that men are without excuse" (NIV). [pp. 70–71]


Do the writings of the past actually mention dinosaurs? Are we confusing reality with myth? There are various explanations for the evidence presented here and on pages 74–75. If humans coexisted with dinosaurs, it would make sense that there would be some records documenting this fact. But if humans and dinosaurs did not coexist, what other explanations might there be for stories about creatures that seem like dinosaurs? [pp. 72–75]

Activity Sheet Questions | #3–5

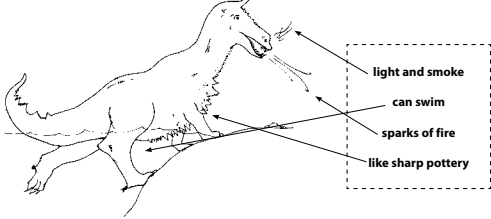
Week 36 Activity Sheets

Dinosaurs Unleashed

1. Do coelacanth fossils prove that fish grew legs and lived on land? Why or why not? (pp. 64-65)
(No, because fishermen have caught many coelacanths since 1938 that prove the "legs" are actually fins and that their skeletons haven't changed at all since others were fossilized)



2. Use the phrases in the box to help you describe Leviathan as God did in the Bible. (p. 68)



3. Choose one of the creatures on pages 70-71 and explain why you find it amazing. _____
(Answers will vary)

Does this creature teach you anything new about what God is like? If so, what? _____
(Answers will vary)

4. We have stories from all around the world that sound like they have dinosaurs in them. (pp. 72-75) **True** **False**


Which characters in these stories probably refer to dinosaurs? (pp. 72-74)

monsters whales dragons bad guys

Geology, Meteorology, and Mechanical Technology | Week 36 | Student Activity Sheets **101**

Week 36 Activity Sheets

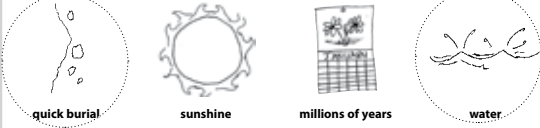
5. Why do you think there are so many stories about dragons from all parts of the world? (p. 75)
(Possible: because people probably lived with dinosaurs)




6. Dinosaur graveyards are found ... (p. 77)

... only in the United States. ... only in the north.
 ... only in the U.S. and Asia. ... all over the world

7. Which of the following are needed in order for a fossil to form? (p. 78)



8. Draw an arrow on the picture to show the length of a cubit. (p. 81)



(from elbow to tip of middle finger)


Geology, Meteorology, and Mechanical Technology | Week 36 | Student Activity Sheets **102**

Week 36 Activity Sheets

9. How do we know the Earth was a different place after the Flood? (p. 84)
(because people didn't live as long after the Flood as they did before it)

10. Why might the dinosaurs have disappeared after the Flood? (pp. 84-85) _____
(they may have had a harder time living in Earth's new climate, or humans may have hunted them to extinction)

11. Why do so many cultures have stories about a great Flood? (pp. 86-87)
(because all of the people on Earth are descendants of Noah, and families would have passed the story down as new generations grew)



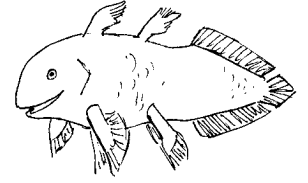
Geology, Meteorology, and Mechanical Technology | Week 36 | Student Activity Sheets **103**

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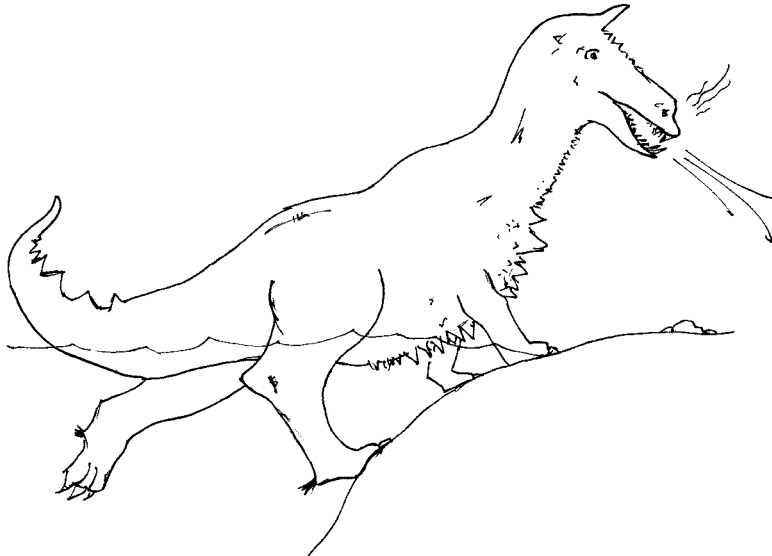


Dinosaurs Unleashed

1. Do coelacanth fossils prove that fish grew legs and lived on land? Why or why not? (pp. 64-65)



2. Use the phrases in the box to help you describe Leviathan as God did in the Bible. (p. 68)



light and smoke
can swim
sparks of fire
like sharp pottery

3. Choose one of the creatures on pages 70-71 and explain why you find it amazing. _____

Does this creature teach you anything new about what God is like? If so, what? _____


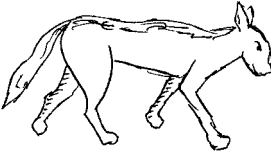
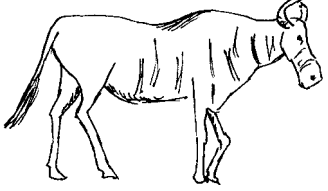





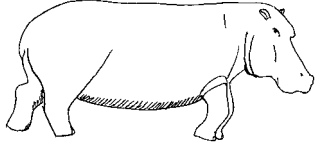


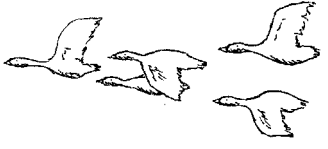












4. We have stories from all around the world that sound like they have dinosaurs in them. (pp. 72-75) **True** **False**

Which characters in these stories probably refer to dinosaurs? (pp. 72-74)

- monsters whales dragons bad guys

Cut-Out #2



		
proboscis monkey	jackal	wildebeest
		
koala	hyena	raccoon
		
tarsier	lion	hippo
		
chimp	brown bear	geese
		
nose	scavenger	prey
		
marsupial	carnivore	omnivore
		
nocturnal	predator	herbivore
		
diurnal	hibernation	migration

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Cut-Out #3



