

REASONING

CLEAR REASONING AND APOLOGETICS

Tailoring

It is important to the classroom environment for all students to read the assigned rhetoric chapter or lesson. The focus of this seminar is for students to begin to develop the skills of clear reasoning and critical thinking.

When families have time for more:

- Assign questions from the appropriate Rhetoric Snippet on CC Connected®, Challenge Tier > At Home Sharing Center.
- Complete one or two end-of-chapter activities from *It Couldn't Just Happen*.
- Have students outline the *It Couldn't Just Happen* chapters instead of completing the Rhetoric Study Guide.

When families have a busy week:

- Do not assign *The Fallacy Detective* lesson exercises.
- Do not assign *It Couldn't Just Happen* Rhetoric Study Guide.

AT HOME

- Daily: Drill catechism questions using flashcards the student has created or oral questioning by the parent.
- Read *It Couldn't Just Happen* chapter and fill out the Rhetoric Study Guide or highlight the chapter. The assignment is determined by the teaching parent.
- Read *The Fallacy Detective* chapter(s) and answer the questions at the end of the chapter(s).
- Discuss *The Fallacy Detective* and *It Couldn't Just Happen* with parent.

IN COMMUNITY

- Review the process of studying a scientific text.*
- Optional: Review the use of the highlighting system by discussing the various colors and their uses and providing examples from the text. Consider introducing one color at a time with a few weeks of practice between each introduction.
- Discuss *It Couldn't Just Happen* by asking five common topic questions, highlighting or outlining the chapter together in class, sharing favorite quotes from a chapter, reading aloud radio theater style, making a topic wheel, creating a class issue, using *Trivium Tables®: Rhetoric* to create quick persuasive essays for both sides of the issue, or using parts of Rhetoric Snippets available on CC Connected.
- Discuss *The Fallacy Detective* by reading the lessons aloud radio theater style, completing exercises as a group, writing fallacies using Challenge A literature or *It Couldn't Just Happen*, or using parts of Rhetoric Snippets available on CC Connected.
- Review catechism questions playing *Jeopardy!* or other games.

*Please see the article, “How to Learn from a Book” in the *Challenge A Guide* LTW appendix pages 175–176 for more information about the highlighting system.

BEGIN THE CONVERSATION

INVENTION: 5 COMMON TOPICS

Define the new vocabulary from *It Couldn't Just Happen* or *The Fallacy Detective*.

DEFINITION



How are the new fallacies similar to or different from each other?

COMPARISON



When is a particular fallacy most persuasive?

CIRCUMSTANCE



How could we summarize this chapter of *It Couldn't Just Happen*?

RELATIONSHIP



What are the most persuasive arguments for creation or evolution in this chapter?

TESTIMONY



Highlighting Guidelines:

Pink highlighting: Words, names, dates, and places that seem important. Nouns that answer *who*, *what*, *when*, and *where*.

Green highlighting: Lists, questions, and structural clues such as ordinal numbers (first, second, etc.) and conjunctive adverbs* (although, consequently, finally, however, then, therefore...).

Orange highlighting: Examples and figures of speech.

Blue highlighting: Interesting or important quotes—things to share with another person.

**Trivium Tables*[®]: *English Grammar*

REASONING

CATECHISM QUESTIONS

Numbers in parenthesis are the page numbers in *It Couldn't Just Happen*, September 2015 edition. All the catechism answers come from *It Couldn't Just Happen. Classical Acts & Facts® Science Cards* may be used as an optional resource.

1	What does the theory of evolution state?	The theory of evolution states that “life began as a chance combination of nonliving chemicals” (page 98).
2	In the Psalms, what do the heavens declare?	<i>The heavens declare the glory of God; the skies proclaim the work of his hands.</i> Psalm 19:1 (pages 4–5)
3	What does the second law of thermodynamics , often called the law of entropy, express?	The second law of thermodynamics , often called the law of entropy expresses “that anything that is organized tends, with time, to become disorganized” (page 8).
4	What makes up our solar system ?	Our solar system is “made up of our sun, eight planets and their moons, and thousands of other bits of matter called asteroids and comets” (page 14).
5	Describe the sun .	“The sun is an unusual, small, yellow dwarf star that provides the perfect amount of energy for life on earth” (pages 22–24).
6	According to Psalm 24, what belongs to the Lord?	<i>The earth is the LORD'S and everything in it, the world, and all who live in it.</i> Psalm 24:1 (page 24)
7	What does the greenhouse effect theory suggest?	The greenhouse effect theory suggests that as “the amount of carbon dioxide in the atmosphere is increasing,” the “earth’s temperature would rise, causing ‘global warming’” (page 31).
8	What is the importance of ozone ?	“ Ozone absorbs 97%–99% of the sun’s high frequency ultraviolet light, protecting life on the surface” of the earth “from harmful radiation” (page 34).
9	What is the percentage of oxygen necessary for human life?	“On earth the air is 21% free oxygen” (page 35).
10	What is the definition of cataclysm ?	Cataclysm is “a violent and sudden change or a disaster” (page 48).
11	What is the definition of uniformitarianism ?	Uniformitarianism is the belief that Earth’s past geological changes “can be fully explained by processes taking place today” (page 40).

12	What does the theory of continental drift state?	The theory of continental drift states that “the great plates on which the continents rest drift” (page 47).
13	What is radiometric dating ?	Radiometric dating uses the decay rate of radioactive material to date objects (page 55).
14	Why is radiometric dating inaccurate?	Radiometric dating is inaccurate because it assumes that specifics are known about the original material (pages 57–58).
15	What is the definition of organic matter ?	Organic matter “is the material that comes from, or is made up of, once-living things” (page 59).
16	What is the definition of good science ?	“ Good science constantly searches for new information and is open to correction” (page 70).
17	What was Copernicus famous for?	Copernicus was a Polish scientist who first promoted the theory that the planets revolve “around the sun” (page 69).
18	Who was Charles Darwin ?	“ Charles Darwin is the man who presented the theory of evolution in his book <i>On the Origin of Species</i> ” (page 87).
19	Who was Francesco Redi ?	Francesco Redi discovered that when microscopic eggs were laid on spoiled meat, they developed into white worms and grew into flies. (page 75).
20	What are four chemicals found in a cell?	Four chemicals found in a cell are amino acids, lipids, porphyrins, and polynucleotides (pages 78–79).
21	What are proteins ?	Proteins are found in “living things” and “are made up of chains of amino acids” (page 82).
22	What is the definition of natural selection ?	Natural selection is the idea that the fittest survive and pass along their traits to their offspring (pages 88–89).
23	What is the significance of the Galapagos Islands ?	The Galapagos Islands are the place Darwin noticed the adaptability and variations within animal species (pages 87–88).
24	What are chromosomes ?	“ Chromosomes are like long thin strings composed of DNA and proteins” (page 90).
25	What is a fossil ?	A fossil is the “remains or traces of plants and animals that are found in rocks” (page 98).
26	What is stratum ?	Stratum is a “layer of rock thought to have been laid down in the same general period of time” (page 103).

REASONING

27	What is meant by the standard geological column?	The standard geological column is a theoretical column of rock believed to show various stages of fossilized life (page 103).
28	What is the definition of homologous ?	“In biology,” homologous means similar structures or features of a plant or animal (page 117).
29	What makes a woodpecker’s beak unique?	A woodpecker’s beak is designed with “a pad of spongy tissue that acts as a shock absorber” (pages 127–128).
30	How does the penguin care for its young?	The penguin “has an apron of feathered skin to warm the egg,” and it perfectly shares the care of its chick with its mate (pages 129–130).
31	What is unusual about the tongue of a malleefowl?	The tongue of the Australian malleefowl is used to test if the nest temperature has changed “as little as $\frac{1}{10}$ of a degree” (pages 130–131).
32	How does a bat locate food?	A bat is a mammal that emits sounds up to 20 to 30 times a second to locate “flying insects” (pages 132–133).
33	What is unique about the gazelle?	“The fast-running gazelle of Africa,” is a mammal that would overheat its brain while running if not for a specially designed “cooling system” (pages 134–135).
34	What is unique about the termite?	The termite is an insect that keeps the inside of its mound at 64 degrees, “no matter what” the temperature is outside. (pages 139–140).
35	How does a bee communicate?	A bee uses very complicated dances to communicate (pages 141–142).
36	What is unique about the army ant?	The army ant is an insect that creates the queen’s nest using its own workers (pages 142–144).
37	What is the definition of mutualism ?	Mutualism is the relationship between two creatures that makes them mutually dependent upon each other to sustain life (page 150).
38	What is the definition of mimicry ?	Mimicry is the design of “a flower or animal structure” to look “like something else” (page 152).
39	What is the “hopeful monster” theory?	The “hopeful monster” theory is an evolutionary theory that states that occasionally an animal births a “totally new creature” (page 95).

REASONING

40	What is the significance of the discovery of Pitldown Man ?	Pitldown Man was a stained human skull and filed ape jaw used to support evolution although it was “shown to be a hoax” (page 159).
41	What does the word hominid mean?	Hominid refers to bones, which paleontologists label “in the line of man” (page 163).
42	What does Genesis 2:7 state?	<i>And the LORD God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul (KJV).</i>
43	Why is the skin important?	The skin is an organ that “helps regulate [body] temperature” and is a disease barrier (page 170).
44	What is the function of the heart?	“The heart is the most powerful muscle in your body,” pumping 4,000 gallons of blood a day (page 171).
45	What is the importance of the lungs?	The lungs are two organs that pass oxygen into every red blood cell carried through their capillaries (pages 172–173).
46	What is the function of the medulla oblongata?	“The lowest part of the brain, called the medulla oblongata, is responsible for automatic things like breathing and your heart beating” (page 182).
47	What is the job of the cerebellum?	The cerebellum is the part of the brain “associated with voluntary” responses (page 182).
48	What is the cerebrum?	The cerebrum is the part of the brain that is “associated with consciousness, memory, reasoning,” and the senses (page 183).
49	Quote Romans 1:20.	<i>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 people are without excuse (page 194).</i>
50	What is significant about the phrase, “Here is what the Lord says”?	“‘Here is what the Lord says,’ is found more than 2,000 times in the Old Testament alone!” (page 194).
51	What is archaeology?	“Archaeology is the study of human history through the excavation of the remains of the past.” (page 195).
52	What is true about Jesus and Old Testament prophecy?	Jesus is THE ONLY man to fulfill EVERY Old Testament prophecy about the birth, life, death, and resurrection of the Messiah (page 204).

© 2018 Classical Conversations® MultiMedia

REASONING

53	What was the first miracle performed by Jesus, as documented in the Gospels?	Jesus “turned water in twenty-gallon jars into wine (John 2:1–11)” (page 206).
54	Who was Lazarus?	Lazarus was Jesus’ friend whom Jesus raised from the dead in John 11:1–44 (page 207).
55	What is the meaning of the gap theory?	The gap theory suggests that there was an enormous gap in time between Genesis 1:1 and Genesis 1:2 (page 218).
56	What is the day-age theory?	The day-age theory suggests that “there may have been long ages between each creative day” (page 218).
57	What is the revelatory-day theory?	The revelatory-day theory suggests it took God seven days to reveal how He created the world to Moses (page 218).

REASONING STUDY GUIDE

Parents: Make copies of this and the next page, and place in notebook for student use. For each page, SCAN chapter captions, charts, graphs, and section titles. READ the chapter. LIST any vocabulary you don't know; look up the word and record definitions. COMPLETE the chapter title, section headings, and summarize each section on this study guide as time allows in each week.

Chapter # _____ Title: _____

Look at each picture, each graph, each section title, and the questions at the end of the chapter. What does the chapter seem to be about?

Introduction? _____

Section 1 _____

Summary: _____

Section 2 _____

Summary: _____

Section 3 _____

Summary: _____

Section 4 _____

Summary: _____

REASONING

Section 5 _____

Summary: _____

Section 6 _____

Summary: _____

Section 7 _____

Summary: _____

Section 8 _____

Summary: _____

Section 9 _____

Summary: _____

Section 10 _____

Summary: _____

JEOPARDY!™

Points	Bible/People	Theories/Definitions	Body	Animals	Miscellaneous
100	2 Psalm 19:1	1 Evolution	9 % Oxygen	28 Homologous	3 Thermodynamics
200	6 Psalm 24	7 Greenhouse Effect	20 Chemicals in Cells	29 Woodpecker	4 Solar System
300	17 Copernicus	10 Cataclysm	21 Proteins	30 Penguin	5 Describe the Sun
400	18 Who is Darwin?	11 Uniformitarianism	24 Chromosomes	31 Malleefowl	8 Ozone
500	19 Francesco Redi	12 Continental Drift	43 Skin	32 Bat	13 Radio. Dating
600	40 Pittdown Man	15 Organic Matter	44 Heart	33 Gazelle	14 Radio. Dating Inaccuracy
700	42 Genesis 2:7	16 Good Science	45 Lungs	34 Termite	23 Galapagos Islands
800	49 Romans 1:20	22 Natural Selection	46 Medulla Oblongata	35 Bee	25 Fossil
900	50 the Lord says...	39 Hopeful Monster	47 Cerebellum	36 Army Ant	26 Stratum
1000	52 Jesus and OT Prophecy	55 Gap Theory	48 Cerebrum	37 Symbiotic	27 Standard Geo Column
1100	53 John 2	56 Day-Age Theory		38 Mimicry	41 "Hominid"
1200	54 Lazarus	57 Rev-Day Theory			51 Archaeology

© 2018 Classical Conversations® MultiMedia

To play *Jeopardy!* with the Catechism questions, list the category topics on the board with point values as shown. Students or teams can take turns picking a question to answer by indicating the category column and the point row, e.g.,

"Body for 400." The director or parent will ask the corresponding question. Students should give the answer. The director or parent can rearrange the point values for the questions under each category as the year progresses, if desired.

NOTE: The prompt words listed under the question numbers are included to help the director or parent remember which question is attached to that number. Directors/parents should ask the *complete question* as listed on the previous pages.