

SHOW HOW A BIBLICAL WORLD VIEW CAN INFORM SCIENTIFIC INNOVATION.

Modern science deliberately / typically ignores the possibility of a Creator God and His designs. Such a view impoverishes science and stunts students' understandings. Our topic provides an opportunity for students to study the scientific innovations of Christians, past, present and future.

Here are suggestions for an integrated unit, showing which activities could be undertaken for each curriculum area, and for which of the six categories of competition they might be relevant. **The suggestions as stated do not necessarily satisfy the rules and judging points of a particular category.** The suggestions are simply non-exhaustive lists of ideas for a variety of activities you could do with your students on the theme of innovation. You can probably think of more ideas or vary those suggested here. Various Bible verses appearing in these suggestions could apply to more than one activity. You may be able to find more appropriate verses for your particular activities than those given. Wording of Bible verses vary in different translations, so, to assist the judges, please note on the entry form which translation you used (eg. NKJV) for a particular entry.

One way to use these activities for the purposes of the competitions is to carefully choose an example of innovation you can make a lot out of. For example, choose an example of innovation for which you can make two or more entries : make a Poster and write a Song, write a factual account or report for a Writing entry, put the science of the example into a Science Project entry, and the mathematics of the example into a Mathematics entry. There may be enough detail from each of these to put together a Drama entry. The same outcome could be achieved by using the activities on these pages to inform the organisation of an **integrated unit** on innovation.

+ beside an activity number means a relevant resource is available for loan from the Creation Education Resource Centre.

Creative Arts.

categories of competition in Semester 1, 2018

activity : other examples of innovation are in activity suggestions for Science & Mathematics	Poster	Song	Writing	Science	Maths	Drama
1. create an artwork of an example of a scientific innovation informed by a Biblical worldview	✓					
2. create a poster of an example of a scientific innovation informed by a Biblical worldview	✓					
3 compile a photographic montage of examples of scientific innovation informed by a Biblical worldview	✓			✓		
4. make a model relating to a scientific innovation informed by a Biblical worldview				✓		
5+ reproduce an example of Robert Marshall's artwork inspired by God's creation ((Genesis 1 : 1)	✓					✓
6 draw a cartoon relating to an example of a scientific innovation informed by a Biblical worldview	✓		✓			
7. draw a comic book about an example of a scientific innovation informed by a Biblical world view			✓			

Health and Physical Education.

categories of competition in Semester 1, 2018

activity suggestions	Poster	Song	Writing	Science	Maths	Drama
1. invent and play a game involving Biblical world view informing scientific innovation			✓	✓		✓
2. study an example of a scientific innovation about good health that was informed by a Biblical worldview	✓	✓	✓	✓		
3. investigate 'Daniel's diet' in relation to faithful observance of Biblical principles (Daniel 1:8–16)			✓	✓		✓
4. explain the diet God provided for Adam and Eve in the Garden of Eden (Genesis 2 : 16)		✓	✓	✓		✓
5. study the application of seasonal cycles in agriculture (Genesis 1 : 14)	✓	✓	✓	✓	✓	✓
6 discuss the significance of 'clean' and 'unclean' animals as food sources (Leviticus chap 11)			✓	✓	✓	
7. discuss the meaning of Isaiah 40:31 in relation to physical strength for God's people who wait on Him			✓	✓	✓	
8. explain the significance of 1 Corinthians 6 : 19 to drug, alcohol and tobacco abuse	✓	✓	✓			✓

Performing Arts.

categories of competition in Semester 1, 2018

activity : <i>other examples of innovation are in activity suggestions for Science & Mathematics</i>	Poster	Song	Writing	Science	Maths	Drama
1. make up a song, hymn or chorus about an example of a scientific innovation informed by a Biblical worldview		✓	✓	✓		
2. make up a rhyme, jingle or rap about an example of a scientific innovation informed by a Biblical worldview		✓		✓		
3. make a song from a verse(es) of Scripture about innovation (eg. Proverbs 25 : 2)		✓	✓			
4. write and perform a song to praise God for enabling people to be innovative (Psalm 9:1–2)		✓	✓			
5. write and perform a ballad about a scientific innovation informed by a Biblical worldview		✓	✓	✓		
6 make up a short play or skit about an example of a scientific innovation informed by a Biblical worldview			✓	✓		✓
7. make up a mime or creative movement about an example of a scientific innovation informed by a Biblical worldview			✓	✓		✓
8. make up a puppet play about an example of a scientific innovation informed by a Biblical worldview			✓	✓		✓
9. create & perform a television ad about an example of a scientific innovation informed by a Biblical worldview		✓	✓	✓		✓
10. create & perform an interview or news item about an example of a scientific innovation informed by a Biblical worldview			✓	✓		✓

English Language Arts.

categories of competition in Semester 1, 2018

activity suggestions	Poster	Song	Writing	Science	Maths	Drama
1. write a story / essay / recount about an example of a scientific innovation informed by a Biblical world view			✓	✓		✓
2. write a report about an example of a scientific innovation informed by a Biblical world view						
3. collate an illustrated recount about an example of a scientific innovation informed by a Biblical worldview			✓	✓		✓
4. collate an illustrated information text about an example of a scientific innovation informed by a Biblical worldview			✓	✓		✓
5. make an illustrated storybook about an example of a scientific innovation informed by a Biblical worldview		✓	✓		✓	
6. compose a poem about an example of a scientific innovation informed by a Biblical worldview			✓	✓		✓
7+ retell part or all of the story of how Genesis 1:29 inspired George Washington Carver in his peanut research			✓	✓		
8+ explain how Isaiah 40 : 22 informed Dr Russell Humphreys in his understanding of expansion of space			✓	✓		
9+ recount Dr Raymond Jones' Biblical world view that encouraged him in his goat research (Col 3: 23)			✓	✓	✓	
10. produce an illustrated reference list of scientific innovations informed by a Biblical world view			✓	✓		
11. compose a crossword puzzle / word search about scientific innovations informed by a Biblical world view			✓			
12.design a leaflet for a specific target audience giving glory to God for enabling people to be innovative			✓			✓
13compose an article for <u>Creation</u> magazine about scientific innovation informed by a Biblical worldview			✓	✓		
14. compile an illustrated lecture for a CMI Superconference about scientific innovation informed by a Biblical worldview			✓	✓		
15+ expound the Biblical world view of Spike Psarris to refute long age explanations for the origin of the solar system			✓	✓		
16+ expound the Biblical world view of Spike Psarris to refute long age explanations for the origin of stars and galaxies			✓	✓		
17+ expound the Biblical world view of Spike Psarris to refute long age explanations for the origin of the universe			✓	✓		
18. write a response to the statement : <i>'The Bible is not a science text book'</i> .			✓	✓		
19. critique the claim that the Bible is too old to be useful			✓			

Science Project.

categories of competition in Semester 1, 2018

activity suggestions	Poster	Song	Writing	Science	Maths	Drama
1.replicate the principle that life arises from life that guided Louis Pasteur (Genesis 1:20–21)	✓	✓	✓	✓	✓	✓
2. study the role of the Biblical world view of John Hartnett in his understanding of the cosmos			✓	✓	✓	✓
3. explain the significance of Professor Andrew McIntosh's Biblical world view to his research on the bombardier beetle			✓	✓	✓	✓
4. relate the Biblical world view of the master craftsmanship of diatoms to the development of diatom nanotechnology	✓		✓	✓	✓	✓
5. recount the importance of a Biblical world view to Prof Stuart Burgess' investigation into the design of a peacock's tail (Ecclesiastes 3:11)			✓	✓		✓
6. investigate the foraging behaviour of ants (Prov 6:6 – 8) as informing the management of major airports			✓	✓	✓	✓
7. study how the use of spider silk (Proverbs 30 : 28) nanotubes in fibre optics could be informed by a Biblical worldview			✓	✓	✓	✓
8. model a buckyball, discovered by Richard Smalley who was a 'better scientist' because of the Bible	✓		✓	✓	✓	✓
9. model the solar system to show Galileo's observations as informed by his Biblical worldview		✓	✓	✓	✓	✓
10. demonstrate the fallow system as an agricultural innovation informed by a Biblical worldview (Lev 25:4)		✓	✓	✓	✓	✓
11. show how Genesis 8 : 22 informs the global warming debate	✓	✓	✓	✓	✓	✓
12. research Paul Brand's contributions towards leprosy treatment and cure, based on his Biblical worldview		✓	✓	✓	✓	✓
13+ investigate how Dr Mark Harwood's Biblical world view informs his design of satellites			✓	✓	✓	✓
14+ explain how Dr David King's Biblical world view has informed his career as an astrophysicist			✓	✓	✓	✓
15+ show how Dr Yves Bergeron's Biblical world view informs his career as a medical biologist			✓	✓	✓	✓
16+ investigate how Dr Matti Leisola's Biblical world view informs his career as a biochemist			✓	✓	✓	✓
17+ show how Dr Don Batten's Biblical world view informed his work in plant physiology			✓	✓	✓	✓
18+ show how Dr Craig Russell's Biblical world view has informed his work as an agricultural scientist			✓	✓	✓	✓
19+ show how Dr Ken Funk's Biblical world view has informed his work as a peptide chemist			✓	✓	✓	✓
20+ show how Dr Jonathan Sarfati's Biblical world view has informed his work as a physical chemist			✓	✓	✓	✓
21+ show how Dr Robert Carter's Biblical world view has informed his work as a marine biologist			✓	✓	✓	✓
22+ show how Dr Dudley Eirich's Biblical world view has informed his work as a molecular biologist			✓	✓	✓	✓
23+ show how Dr John Sanford's Biblical world view has informed his work as a plant geneticist			✓	✓	✓	✓
24+ show how the Biblical world view of Dr Marcus Ross's has informed his work as a palaeontologist			✓	✓	✓	✓
25+ show how Dr Ariel Roth's Biblical world view has informed his work as a geologist			✓	✓	✓	✓
26+ show how Dr Felix Konotey-Ahulu 's Biblical world view informed his work on sickle-cell anemia			✓	✓	✓	✓
27+ show how Dr Peter Line's Biblical world view has informed his work as a neuroscientist			✓	✓	✓	✓
28+ show how Dr George Marshall's Biblical world view has informed his research into eye disease			✓	✓	✓	✓
29+ show how Dr Raymond Damadian's Biblical world view informed his pioneering work of MRI			✓	✓	✓	✓
30+ show how Dr Jim Mason's Biblical world view has informed his work as a nuclear physicist			✓	✓	✓	✓

Mathematics.

categories of competition in Semester 1, 2018

activity suggestions	Poster	Song	Writing	Science	Maths	Drama
1. graph distances flown by the Flying Doctor, a ministry arising from the Biblical worldview of Rev John Flynn	✓	✓	✓		✓	✓
2. investigate the temperature control designed for Alice Springs hospital by Rev John Flynn and how it relates to his Biblical worldview			✓		✓	✓
3. make a barometer and relate it to the Biblical world view of Blaise Pascal			✓		✓	✓
4+ research mathematical discoveries of James Clerk Maxwell and his Biblical world view			✓		✓	✓
5. make a timeline showing scientists who had / have a Biblical world view					✓	
6. conduct a survey of current CMI scientists about how their Biblical world view has informed their work			✓		✓	
7. present survey data on how a Biblical world view has benefitted your family / school			✓		✓	
8. show how Newton's mathematics, informed by his Biblical world view, informed other's work in mathematics					✓	
9. explain the mathematics of Newton's work on gravity and his insight from a Biblical world view			✓		✓	✓
10. investigate the mathematics of Boyle's Law and the influence of Boyls's Biblical world view on his discovery			✓	✓	✓	✓
11. show the geometry of snowflakes, as originally researched by Wilson Bentley (Job 38:22)			✓	✓	✓	✓
12+ present data about the timeframe for Nicolaus Steno's geological model (Genesis 1:1, 8:1)			✓	✓	✓	✓
13. present data about the timeframe for Tas Walker's geological model (Genesis 8 : 1)			✓	✓	✓	✓
14. compare and contrast the two models of Mathematics activities 13 and 14 above			✓	✓	✓	✓
15. grow some plants to repeat Gregor Mendel's experiments in genetics, informed by his Biblical worldview		✓	✓	✓	✓	✓
16. investigate Kepler's mathematics of planetary motion, informed by his Biblical worldview (Ps 19:1)	✓	✓	✓	✓	✓	✓
17. explain the competing time frames of a spraying soldier beetle entombed in amber supposedly as old as the dinosaurs					✓	
18. investigate the mathematical aspects of the construction of the tunnel in 2 Chronicles 32 : 30					✓	✓
19. collate shipping data relating to Matthew Maury's oceanography based on Psalm 8 : 8				✓	✓	✓

Social Studies, including History and Geography.

categories of competition in Semester 1, 2018

activity suggestions	Poster	Song	Writing	Science	Maths	Drama
1. research the significance to the Wright brothers of Genesis 1 : 21 in their aircraft development			✓			✓
2. develop a plan for a Christian university, to produce graduates fit for research with a Christian world view	✓		✓	✓	✓	✓
3. investigate the contributions to medical sciences of Christian hospitals in different places			✓	✓	✓	✓
4+ research the benefits of John Ridley's Biblical world view for those who relied on the products of his wheat stripper			✓	✓	✓	✓
5. analyse the reality of scientific innovation due to order in the universe (1 Corinthians 14 : 33)	✓	✓	✓	✓	✓	✓
6. debate Ben Carson's maxim for life / innovation that one has to ask God for wisdom (James 1:5)	✓		✓	✓		✓
7. discuss the social impacts of Ecclesiastes 1 : 9 in terms of the concept of innovation		✓	✓			✓
8. study the influence of a Biblical worldview on 'the golden age of science' from about 1543–1680 (Gen 1:28)	✓	✓	✓	✓	✓	✓
9. map the ocean currents discovered by Matthew Maury's acceptance of Psalm 8 : 8			✓	✓	✓	✓

