

FAITH

How might we think about the constructive role of faith in science?

LOVE

How can we love others as we collaborate, communicate, and debate?

HOPE

How can we live with hope, pursuing stewardship, justice, and service?

CHANGE

How can learning about faith and science help us to change and grow?

COMMUNITY

How can learning involve the wider community outside the classroom?

HUMILITY

How can we cultivate intellectual humility and honesty?

WONDER

How might we foster awe, wonder, appreciation of beauty, and gratitude?

SCRIPTURE

How can we engage with the Bible when learning about faith and science?

TRUTH

How can we engage well with big truth questions surrounding faith and science?

PEACE

How can we foster peace and reconciliation rather than fear and hostility?

A teacher asks students to discuss what a biologist, chemist, painter, poet, theologian, or economist see when they look at a kitten through the eyes of their discipline. Does science offer the “best” set of eyes? Can we do without the others? Are some closer to the truth? How can pride or humility affect our attachment to one of these viewpoints?

A teacher displays the title of a section from the Belgic Confession, “The Means By Which We Know God,” and asks students to predict what it will mention. Then they read the text and discuss how it matched their predictions. Did they guess that it would include studying the natural world? Does seeing God in the natural world go beyond the boundaries of science?

A teacher displays a list of virtues (for example, humility, honesty, and love) and students sort them according to how closely they seem to be connected with science. Students work in pairs to think of examples of how each virtue might be relevant to learning about science and to the professional practice of science. The goal is to get students to take a critical look at their own implicit view of science.

A teacher is concerned that what is learned in school about science could distance students from their parents. A survey is used in a homework activity to facilitate conversations between students and their parents about common misconceptions about science. The activity is intentionally set up to include students admitting their own misconceptions. Students discuss the conversations afterward in class.

Students are each given a card with a word on it and must form groups by finding others whose word belongs in the same category. Many of the words have more than one possible category. For the whole class to form groups, some initial groupings will have to be dissolved and new combinations tried. Students must negotiate. A debrief focuses on categorization in science, collaboration, and how others were treated.

Students monitor class discussion for interesting questions that reach beyond the assigned learning. Each time one arises, one or two volunteers will research it further and report back. The class is encouraged to think about how to give constructive, supportive feedback to the presenters and to thank them for their contribution to everyone’s learning. The teacher focuses explicitly on how the contributions of each contribute to the learning of all.

Students collect photographs of everyday objects and scenes. For each photograph, they ask a family member what they see in the picture and record their description. They then write a scientific description of what is in the picture and discuss both descriptions with a peer. This leads to class discussion on scientific and non-scientific ways of seeing, and how each may be valid.

Each group of students is given a different version of the same science activity about projectile motion. One version assigns calculations with no context. Another sets them in the context of emergency aid dropped from a helicopter. Another uses the context of a bomb being dropped. As students share their findings with the class they realize that their tasks were not the same. This leads to discussion about the relationship between science and its applications and the relationship of science to ethics.

In preparation for teaching about crystal formation, a teacher prepares a slideshow containing high resolution digital photographs of individual snowflakes. This is displayed for a few minutes at the start of class with dimmed lighting, and quiet music. Each slide is allowed to linger on the screen. A sign posted at the door of the classroom before class encourages students to enter silently.

Students in a Bible class study how the early church handled deep disagreements about Jewish and Gentile identities, and the degree to which becoming part of Israel was necessary for becoming Christian. They examine how different sides were listened to and consider what lessons could be drawn for handling present day disagreements among Christians about scientific issues.