Science versus Philosophy

What is the main difference between science and philosophy?

- Science: one correct answer at a time
- Philosophy: more than one correct answer at a time

What is the difference between science and technology?

- Understanding for its own sake
Why is ‘scientific’ approach important?

- Hasty generalizations
  ▼
  I met 4 or 5 people from Abloga (a country). Three of them were lazy.
  What hasty generalization can be drawn?

- Unreliable polls (numbers, specific groups …)
  ▼
  “Do you go to church at least once a month?” 28%: yes!
  Asked: people who live downtown
  Survey target: Canadians in general
Scientific approach (literacy)

- General knowledge
- Ability to properly evaluate research
- Skepticism
  - Never accept conclusions without solid evidence
  - Even with solid evidence, always leave some room for doubt
A necessary assumption: There Is No Absolute (Final) Truth

- Some ‘final’ truths have been all of a sudden proved wrong!
  Copernicus: Heliocentric theory of the Universe

- Other ‘final’ truths have been proved inadequate
  Newton: space and time is absolute
  Einstein: space and time is relative
Scientific knowledge: necessary conditions

- **Must be testable**
  Polar bears are usually heavier and taller than brown bears.

- **Must be reproducible**
  Water boils at the temperature of 100° C.
  Honda Accord is safer in front crash collisions than Dodge Avenger.
Dangers of common sense

- What appears correct in mind is not always true.
  UV rays are more dangerous in Canada than mid Africa.
  David won Goliath.
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  What is the conclusion?
  Reason (logic, common sense) alone is not sufficient!!!

- We need reliable Scientific Methods (Empiricism)
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