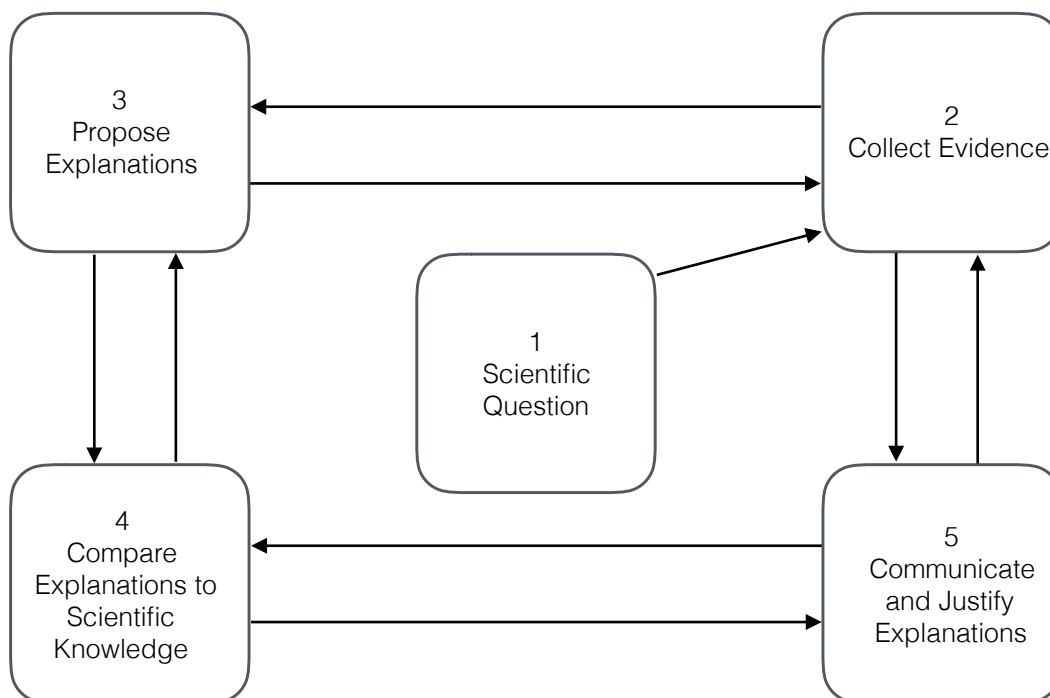


5-DIE Model



	Feature	Short Form	Activity Ideas
1	Scientific Question	Show them some phenomenon	Reflective starter prompts to elicit prior conceptions Questioning prompts to clarify what information should be collected (i.e. what would you want to know?)
2	Collecting Evidence	Give them some data	Analysis of data sets Simulations (PhET) Demonstrations
3	Proposing Explanations	Help them find patterns	Claim-Evidence-Reasoning Activities Modeling activities
4	Comparing Explanations to Scientific Knowledge	Give them the content that explains their patterns	Direct instruction Prompts to elicit student understanding of material Activities to revise initial explanations
5	Communicating and Justifying Explanations	Connect their evidence to the content	Agreement/disagreement discussions (Research Council) Short- or long-answer reflective essays connecting evidence to explanations Modeling activities Engineering activities