

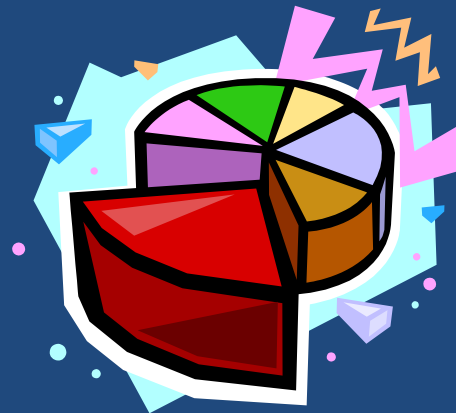


# Data Versus Evidence

Investigate the Difference

Sigma science 2011

Source: Science Scope Sept. 2011



- How can we use data and evidence to develop and support good claims?



# Data

- Information observed and collected as a result of an investigation



# What do we know about evidence?

- Is organized and written in complete and accurate sentences.
- Uses information that is related to your drawing or model.
- Makes a direction connection between observations made during an investigation **and** current research
- Shows your thinking about how the evidence supports the claim

# Does all data = evidence?

- Does every observation or piece of information collected become evidence for a claim?
- Why not?
- If data and evidence were the same, then wouldn't every observation or piece of information be required to support a claim?
- Why not?
- Then how do you choose which data to use as evidence?

# To construct evidence from data:

- Analyze
- Interpret
- Look for patterns
- Reason
- Think about the data with respect to the question we are trying to answer



# All evidence requires data, but not all data needs to be used for evidence

- Do I need to use all the data to support my claim?
- Do scientists only collect the necessary data to support their claim?