NAME: PER. DATE:	
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Lecture Notes: Intro to Biology

What is **science**?

What is the goal of science?

- The goal of science is to _____and ___
 the ____world
- Science is an ______ to learn about the natural world

Thinking like a scientist...

- **Observation** of a phenomenon or problem.
- is gathered from careful observation
 : things that can be counted
 : things that cannot be counted
- Inference is used to logically interpret data
 - o ______: a conclusion reached based on evidence & reasoning

The Scientific Method

- Question
- •
- Experiement
- •
- Analyze Data
- Make a Conclusion

	Ask a Q	uestion			
	1	:			
	Do Back Rese	ground earch			
		l			
	Const Hypot				
		ŀ			
		vith an riment		Experimental	
		l		data becomes	
	Procedure	Working?		background research for	
Troubleshoot procedure. Carefully check all steps and set-up.	No No	Yes		new/future project. Ask new question, form new hypothesis, experiment	
	Analyze I	Data and		again!	
	1	1	'		
Results with Hyp		Result Partially of with Hy	ts Align or Not a pothes	t All:	
	+	+			
	Commu Res				

Designing an experiment

For centuries people thought that could aris from				
This was a theory called generation.				
Spontaneous generation experiment by Francesco Redi: features that are subject to change.				
variables: jar, type of meat, location, temperature, time variables: cork to keep flies away from meat variables: whether maggots appear				
Drawing a Conclusion What was the conclusion of Redi's experiment?				