

UNIT  
1LESSON  
1.4*Making Inferences Notes***Warming Up**

The general purpose of an inference is to explain what is, has or will happened. On the screen is a picture. Your goal is to explain what happened in the picture.

1. **Record:** Write an explanation of what you think happened in the picture.

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2. **Share:** Share your explanation with the class.

3. **Evaluate:** Which explanation from the class is the best? Why?.....

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**Inferences**

When you created your explanation for the picture, you were inferring. Inferences are

- .....
- .....
- .....

**Making Inferences**

There is one easy way to make an inference: .....

Let's look at a few examples. Read the observation and then ask "why?" When you answer the "why" you will have formed your inference.

Observation	My Inference
Late in the evening on the 4th of July a loud bang is heard.	
While trying to access Facebook, an error is displayed instead of the actual web site.	

When you ask "why" it helps you form your inference. This is because inferences explain your observations.

**Rules of Inferences**

In science, inferences have several “rules” that must be followed in order for them to be accepted. Here are the two basic rules of inferences:

1. ....
2. ....

The first rule is self-explanatory. Your inference must explain your observation. When you make your observation and ask “why,” your answer should actually answer the why. The example of “the sun is setting,” cannot have an inference of “the tree is falling down” because that doesn’t explain why the sun is setting.

The second rule is an easy one to follow, too. Ockham’s razor says that sometimes the ..... In reality, what this means is that if you have many possible explanations, the one that is the most simple is probably the best one. Does it always work? No. It’s just a suggestion to follow.

Here’s what Ockham’s Razor means to us: .....

Let’s see an example of a good inferences for an observation.

**Observation:** There is a line of sweating students at the drinking fountain.

**Inference:** .....

Why is this a good inference? Does it explain the observation? Yes. Is it connected to the observation? Yes. Is it a simple explanation? Yes. Therefore, it’s a good inference.

Using the same observation, make another simple inference. Ask yourself “Why else might there be a line of sweating students at the drinking fountain?”

**My inference:** .....

Note: there are many times where several inferences all explain the observation equally well. This is why inferences aren’t required to be true. All they do is propose a possible explanation!