



Reasoning and Logical Fallacies

This week's DebateAble Table is about making better arguments by avoiding logical fallacies. Logical fallacies are a type of bad reasoning used to make arguments. Once you learn what they are, how to spot them, avoid using them and defeat them, you'll become a better debater and critical thinker—and you'll probably win more arguments!

INTRODUCTION

In debate and everyday discussions, people make good arguments and bad arguments. Sometimes it's easy to tell the difference and sometimes it's not. Read through the arguments below, circle whether you think each is good or bad, and explain your opinion in the space provided. What specifically makes each argument a failure or a success?

ARGUMENT 1

Stacy: Brendon, you promised that if I took out the trash, you would clean my room.

Brendon: No, I didn't!

Stacy: Yes, you did!

Brendon: No, I didn't!

Good Bad Why? _____

- Did either Stacy or Brendon give a reason that the other person should accept their argument? If so, what was it?

ARGUMENT 2

Mom: Kai, put your helmet on before you go to ride your skateboard.

Kai: None of the other kids at the skateboard park wear helmets and nothing bad ever happens to them, so why should I?

Good Bad Why? _____

- Do you think Kai's reason for his argument was a good one? Why or why not?

GOOD ARGUMENT v BAD ARGUMENT

What's the difference between a good and bad argument? Is an argument good just because it's convincing? You might think so. But in reality, people are convinced by "bad" arguments all of the time. So what makes an argument "good"?

When we talk about "good" arguments, we mean arguments that use good reasoning and logic to support your claim—or the topic you're arguing. In the examples above, Arguments 1 and 2 are different examples of bad arguments. In the first, Brendon and Stacy trade claims back and forth with no evidence or reasoning to support them. In the second, Kai uses a logical fallacy to support his argument.

As you go through this lesson, see if you can figure out the logical fallacy used by Kai in Argument 2. When you do, write your answer here: _____.

LOGICAL FALLACIES

What is a logical fallacy? A logical fallacy is using *flawed reasoning* to make an argument.

Flawed means defective or bad.

Reasoning is the words you use to explain your argument, and why and how the evidence matters.

People use logical fallacies in their arguments to distract from the other person's position-- Usually when they can't come up with good reasoning or argument of their own.

Why do logical fallacies matter?

- To develop *good* reasoning, it helps to first be able to spot *bad* reasoning.
- Logical fallacies are like tricky paths created for the sole reason of moving your discussion or debate off the main, true trail. As a thinker and a debater, being able to spot logical fallacies helps you to stay on the right track!
- Logical fallacies are used by people in debates, everyday discussions, commercials and even in the news.
- Being able to recognize logical fallacies and combat them is a debate **superpower!**





EXAMPLES OF LOGICAL FALLACIES

There are literally dozens of logical fallacies. You've probably already read or heard some of them being used but maybe you didn't know they had a name. We chose a few of the most common for this lesson. Follow these instructions for each logical fallacy listed and invite someone to follow them with you. Share and compare your answers.

- **Read** the logical fallacy, its definition and the example.
- **Write:** Answer the question and come up with an example of your own.
- **Read:** how to defeat the logical fallacy and the speech bubbles.
- **Write:** Think of how you could respond to the Example provided or Your Example in the top section and write it

1. **AD HOMINEM:** (Pronounced just like it looks.) Attacking the other **person** instead of their **argument**. Ad hominem fallacies include any argument that's focused on WHO the opponent is instead of WHAT the opponent says.

EXAMPLE: *You're arguing that all kids should take PE class, but it looks like you haven't been to the gym in years!*

Why is this an ad hominem fallacy? _____

- YOUR EXAMPLE: _____

Fun fact: ad hominem is Latin for arguing "at the man" or "to the man"

DEFEAT AD HOMINEM FALLACIES

(1) Point out their personal attack and remind the speaker that it has nothing to do with the argument.

(2) Ask them if they have an actual argument and, if they do, to please share it.

(3) Move on.

Why would you listen to her opinion on climate science? She's only 15 years old. What does she know?

You're attacking her for her age but that has nothing to do with the evidence. That's an ad hominem fallacy. If you have an argument that actually contradicts the evidence, I'd like to hear it.

- How would you defeat the EXAMPLE provided, or YOUR EXAMPLE?

2. **HASTY GENERALIZATION:** Jumping to a conclusion based on a single example or a very small sample size.

EXAMPLE: *I've been to the zoo twice and I've never seen an animal mistreated. Therefore, all zoos treat animals well.*

Why is this a hasty generalization fallacy? _____

- YOUR EXAMPLE: _____

DEFEAT HASTY GENERALIZATION FALLACY

(1) Start by noticing the source for the argument

(2) If it's based on the opinions or experiences of just a few people, or one person's experience in just a few situations, point it out and ask your opponent if they have stronger evidence.

My grandfather smoked for fifty years and he lived to be over 90. Cigarettes can't be that bad for you!

I'm happy for your grandfather, but he's just one person. Do you have any evidence that contradicts the high rate of lung cancer for people who smoke versus those who don't?

How would you defeat the EXAMPLE provided, or YOUR EXAMPLE?



DebateAble Table

Table topics to get the whole family talking.



3

3. BANDWAGON: Arguing that something is true just because it's popular with other people.

EXAMPLE: *McDonalds has sold over 1 billion hamburgers. They must be the best fast food burgers!*

Why is this a bandwagon fallacy? _____

• YOUR EXAMPLE: _____

Fun fact: bandwagon was used in the 1800s when circuses – and then, politicians--- would ride big wagons carrying musical bands, and encourage people to “jump on their bandwagon” to show their support.

DEFEAT BANDWAGON FALLACY

(1) Point out many people doing or thinking something, by itself, is not good evidence, and ask if they have other evidence

(2) You might build your argument by mentioning a bad idea that many people supported. For example, that the earth was flat.

Everyone I know who cares about the future of our country is voting for her. Therefore, you should too.

I'm not sure that's true. But even if it is, what everyone else is doing doesn't tell me why I should do it. Can you give me any other reason she deserves my support?

How would you defeat the EXAMPLE provided, or YOUR EXAMPLE?

4. SLIPPERY SLOPE: Arguing that one step leads to another and another and another until reaching a horrible result.

EXAMPLE: *If I fail this test, then I will flunk the class. If I flunk the class, I'll flunk out of school. If that happens, then my entire future is ruined and I will never be able to get a good job!*

Why is this a slippery slope fallacy? _____

• YOUR EXAMPLE: _____

DEFEAT SLIPPERY SLOPE FALLACY: Point out that there are many unknown factors from the first step to the last step of the argument, and how silly or unlikely it is.

If we let students protest school lunches today, the next thing they'll do is protest tests and teachers and homework and pretty soon they'll be boycotting school all together!

Using free speech to call for better quality school lunches has nothing to do with what happens in the classroom. That's a slippery slope argument!

How would you defeat the EXAMPLE provided, or YOUR EXAMPLE?

5. RED HERRING: Distracting attention from the real issue by drawing attention to something else.

EXAMPLE: *We haven't given raises to our employees in five years, but we do make good products and have good customer service!*

Why is this a red herring fallacy? _____

• YOUR EXAMPLE: _____

Fun fact: Red herrings were used to train hunting dogs. Owners would drag the fish across hunting trails to teach dogs not to be distracted by the stinky smell.

DEFEAT RED HERRING FALLACY: Stay strong and calm, don't be distracted! Restate your point and ask them to return to the issue being argued. You might even tell them you noticed that they're trying to change the topic by using a red herring!

How do I feel about healthcare? Don't you even care what I've done for education in America?!

My question was: How are you going to help all Americans get better healthcare? We can talk about education at another time. Please stick to the topic.

How would you defeat the EXAMPLE provided, or YOUR EXAMPLE?