

# Critical Thinking Worksheets

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## What is Critical Thinking?

Critical thinking is like being a detective. It's when you ask questions, think carefully, and decide if something makes sense or not.

## What is a Logical Fallacy?

A logical fallacy is like a trick in an argument. It's when someone tries to convince you of something by using reasoning that sounds good but is actually not strong or fair. Imagine someone saying, "You should eat ice cream for breakfast because all your friends do it." That doesn't make it a good idea, right? That's a logical fallacy!

### Here's a list of the ones people often use:

- **Ad Hominem**

Attacking the person instead of their argument.

Example: "You can't trust her argument on environmental policy because she drives a gas-guzzling car."

- **Appeal to Authority**

Believing something because a famous person said it.

Example: "This diet must be effective because a celebrity endorses it."

- **Bandwagon Fallacy**

Thinking something is true because lots of people believe it.

Example: "Everyone is buying this brand of sneakers, so they must be the best."

- **False Dilemma**

Saying there are only two choices when there are actually more.

Example: "You're either with us or against us."

- **Hasty Generalization**

Making a quick judgment based on little or no evidence.

Example: "I met one rude person from that city, so everyone there must be rude."

- **Slippery Slope**

Saying one small thing will lead to a big, bad result without proof.

Example: "If we allow students to chew gum in class, soon they'll be breaking all the rules."

- **Straw Man**

Changing someone's argument to make it easier to attack.

Example: "If we allow students to chew gum in class, soon they'll be breaking all the rules."

## Logical Fallacies Quiz

Decide if each statement is a logical fallacy and name the type if it is

**1. I'll do what most people say I should do. That many people would never be wrong about anything.**

Is this a correct way of thinking?

Yes, it's correct       No, it's a fallacy

What kind?

**2. I've had perfect grades; I'm not going to believe what anyone else has to say.**

Is this a correct way of thinking?

Yes, it's correct       No, it's a fallacy

What kind?

**3. You can't trust his argument on climate change because he's not a scientist.**

Is this a correct way of thinking?

Yes, it's correct       No, it's a fallacy

What kind?

**4. We can't allow students to use calculators in exams; next, they'll want to use computers for everything.**

Is this a correct way of thinking?

Yes, it's correct       No, it's a fallacy

What kind? Slippery slope

**5. The mayor is against the new park development, so anyone who supports it must not care about our city.**

Is this a correct way of thinking?

Yes, it's correct       No, it's a fallacy

What kind?

## Logical Fallacies Quiz

Decide if each statement is a logical fallacy and name the type if it is

**6. If we don't stop eating meat now, the planet will become uninhabitable in a few years.**

Is this a correct way of thinking?

Yes, it's correct       No, it's a fallacy

What kind? Slippery slope

**7. She's a famous actress, so her opinion on nutrition must be correct.**

Is this a correct way of thinking?

Yes, it's correct       No, it's a fallacy

What kind?

**8. He's wrong because he's too young to understand these complex issues.**

Is this a correct way of thinking?

Yes, it's correct       No, it's a fallacy

What kind? Ad hominem

**9. Eating fruits and vegetables is beneficial for your health.**

Is this a correct way of thinking?

Yes, it's correct       No, it's a fallacy

What kind?

**10. She can't be a good leader because she made a mistake in her personal life.**

Is this a correct way of thinking?

Yes, it's correct       No, it's a fallacy

What kind?

## Fact vs. Opinion

Is each statement a fact or an opinion? Remember, a fact is something that can be proven true, and an opinion is what someone thinks or feels.

1. **Chocolate is the best flavor of ice cream.**

Fact     Opinion

2. **The Earth orbits around the Sun.**

Fact     Opinion

3. **Cats are better pets than dogs in every way.**

Fact     Opinion

4. **Water boils at 100°C at sea level.**

Fact     Opinion

5. **Reading is a boring activity.**

Fact     Opinion

6. **The capital of France is Paris.**

Fact     Opinion

7. **Blue is a better color than red for every purpose.**

Fact     Opinion

8. **Humans need oxygen to survive.**

Fact     Opinion

9. **Gym class is the most fun class in school.**


Fact     Opinion

10. **The fastest land animal is the cheetah.**

Fact     Opinion

## Rebus Puzzles

Rebus puzzles combine illustrations or words with other words and letters to make other phrases. Here is an example:

"Try to understand"	Try $\frac{\text{stand}}{2}$
Travel over seas	<u>TRAVEL</u> CCCCCCC
Step father	father 
3D movie	D movie D movie D movie
Water slide	water
Thanks very much	thanks thanks thanks thanks thanks thanks thanks thanks thanks thanks

## Dissect an Advertisement

Look at the sample advertisement below and answer the following questions. This exercise will help you think critically about the messages you see in ads.

For each question, think about what the advertisement is trying to tell you and why. Use your critical thinking skills to analyze the message. The brand, company, and nutrition facts are made up, but analyze their advertisement as you would a real product.



### CHOCO Cereal: Start Your Day the Heart-Smart Way!

Indulge in the irresistible taste of CHOCO Cereal, the perfect way to kickstart your morning with a smile!

Our delicious chocolate-flavored cereal is not just a treat for your taste buds, but it's also good for your weight and your heart. Packed with essential nutrients and made with love, CHOCO Cereal is your go-to choice for a balanced and heart-healthy breakfast.

Say goodbye to boring mornings and hello to a happier, healthier you with Choco Cereal!

*Produced by CornSyrup Global, a Fortune 500 company.*

## Nutrition Facts

8 servings per container

**Serving size**

1 cup (40 g)

Amount per serving

**Calories**

**270**

**% Daily Value\***

**Total Fat** 2 g 3 %

Saturated Fat 1 g 5 %

Trans Fat 0 g

**Cholesterol** 0 mg 0 %

**Sodium** 150 mg 7 %

**Total Carbohydrate** 40 g 15 %

Dietary Fiber 2 g 7 %

Total Sugars 30 g

Includes 30 g Added Sugars 30 %

**Protein** 0 g

The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

What is the message?

Choco cereal tastes good and is healthy

Who is delivering the message?

Choco cereal brand

What do you know about the messenger's beliefs?

They want to sell cereal, and they make corn syrup

What will they gain if you believe their message?

They get to sell a lot of cereal

What observations have you made that question their message?

Well, they want to sell a lot of cereal so they're saying it's healthy, but mom said eating a cup of this cereal has more sugar and calories than a full meal. A cup is less than a bowl, and I'm still hungry even after eating a bowl. This will make kids fat.

Tell someone what you think (say, your parent or your friend), and try to convince them based on what you know.

Choco cereal is lying that it's healthy because if you look at the nutrition facts, it's very high in calories and sugar. They just want to sell a lot of cereal so they're saying it's healthy. Parents want to buy healthy food for their kids.

## Answer Key

### Logical Fallacies Quiz

1. Yes, Bandwagon Fallacy
2. Yes, Appeal to Authority
3. Yes, Ad Hominem
4. Yes, Slippery Slope
5. Yes, False Dilemma
6. Yes, Hasty Generalization
7. Yes, Appeal to Authority
8. Yes, Ad Hominem
9. No
10. Yes, Ad Hominem

### Fact vs. Opinion

1. Opinion
2. Fact
3. Opinion
4. Fact
5. Opinion
6. Fact
7. Opinion
8. Fact
9. Opinion
10. Fact

### Rebus Puzzles

1. Travel Overseas
2. Stepfather
3. 3D Movie
4. Waterfall
5. Many Thanks or Thanks a lot

### Dissect an Advertisement

Students may have different answers, but look for answers similar to these:

#### What is the message?

CHOCO Cereal is delicious and good for your health.

#### Who is delivering the message?

CHOCO Cereal brand or the CornSyrup Global company.

#### What do you know about the messenger's beliefs?

- The company sells cereal
- The company is named CornSyrup Global, so they may also sell corn syrup
- The company is for-profit because it is in the Fortune 500.

#### What will they gain if you believe in their message?

They will sell a lot of cereal

#### What observations have you made that make you question their message?

- The product is made of chocolate
- The nutrition label says it has high calories and a lot of sugar
- The company uses corn syrup

#### Tell someone what you think (say, your parent or your friend), and try to convince them based on what you know.

This depends on the student's other answers; as long as they try to outline what they know in a way that is convincing and free of logical fallacies, it is valid. You can commend them if they include source.