



EduTrend Contents

P4C · KNOWLEDGE AND EPISTEMOLOGY · MIDDLE SCHOOL

Can You Trust Your Senses?

Illusions and the limits of seeing

Ages 11–13

Level: Intermediate

50 minutes

Circle and small groups
· up to 30

Activity 03

Inside: activity at a glance · step-by-step session plan · facilitator notes · 3 student worksheets · assessment checklist

ACTIVITY 03 · AT A GLANCE

Can You Trust Your Senses?

Students look at classic visual illusions, such as the Müller-Lyer illusion, where two lines of equal length look different, and a straw that looks bent in a glass of water. They predict, then measure or test. They create questions and enquire into whether our senses can give us knowledge if they can be fooled.

Learning outcomes

By the end of the session students can:

- describe how illusions work;
- test predictions;
- reason about the reliability of the senses;
- reach a justified view.

KEY WORDS

senses · illusion · perception · test · evidence · reliable

CURRICULUM LINKS

Science: light and perception. Art: optical art. Maths: measuring.

1**STIMULUS**

Share something to think about

2**THINK**

Quiet thinking time

3**QUESTION**

Create and choose a question

4**ENQUIRE**

Reason together

5**BUILD**

Agree, disagree, add

6**REFLECT**

Last words

Materials (per class)

- Illusion cards
- Rulers
- A glass of water and a straw
- Question and thinking-move cards
- Worksheets 1, 2 and 3

Before the session

- Read the stimulus and note possible concepts.
- Prepare question and thinking-move cards.
- Set out a circle so everyone can see each other.
- Print the worksheets.

SAFETY

Everyone may pass. Discuss ideas, not people, and use the story or invented examples rather than personal situations.

ACTIVITY 03 · SESSION PLAN

Step by step

Stay neutral: ask for reasons, examples and counter-examples rather than giving your own view.

Time	What happens	Say or ask
0–8 min Stimulus	Show the illusions and let students test them.	<i>"What did you notice?"</i>
8–20 min Questions	Students create questions in pairs and vote on one.	<i>"Which question is most interesting to talk about?"</i>
20–44 min Enquiry	Enquire into the chosen question, building on each other's ideas.	<i>"Can you trust your senses?"</i>
44–50 min Last words	Each person says one last thought or passes.	<i>"Has your thinking changed?"</i>

CHALLENGE CARD (print or copy onto the board)

Explain how far we can trust our senses.

ACTIVITY 03 · FACILITATOR NOTES

The philosophy in brief

The Müller-Lyer illusion shows that lines of equal length can look different because of the arrow shapes at their ends.

Philosophers such as René Descartes used errors of the senses to ask what we can know for certain.

Common ideas to listen for

- “Illusions mean our eyes are broken.” Normal vision is fooled.
- “If senses can be wrong, they are useless.” Usually they work well.
- “Measuring is not using the senses.” It uses them carefully.

Adapting the activity

Support

Test one illusion.

Stretch

Find a way to check each illusion without trusting your eyes alone.

WORKSHEET 1

Our questions

Name: _____

Class: _____ Date: _____

Write questions the stimulus makes you wonder about.

Our questions

Question	Who asked	Votes

WORKSHEET 2

Illusion test

Predict and check.

Illusion test

Illusion	Prediction	Result	What it shows

WORKSHEET 3

Last words

Before and after.

If your senses can be fooled, how can you know anything? Before the enquiry I thought... Now I think... because...

FOR THE TEACHER

Assessment checklist

Use during the session. One sheet covers up to eight students; copy as needed.

Student	Asks a philosophical question	Gives reasons and examples	Listens and builds on others

Suggested codes: W = working towards · E = expected · G = greater depth

ABOUT THIS ACTIVITY

Can You Trust Your Senses? is a sample activity from the EduTrend Contents P4C Knowledge and Epistemology programme (middle school, level: intermediate). Every activity in the programme follows the same format: a practical challenge, a clear session plan, facilitator notes and ready-to-print worksheets, so that teachers, club leaders and parents can run it without extra preparation.

Full 15-, 20- and 32-week programmes are available from EduStore at edutrend.org.

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