



EduTrend Contents

P4C · LANGUAGE AND MEANING · MIDDLE SCHOOL

When Does a Heap Become a Heap?

Vague words and the sorites puzzle

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

When Does a Heap Become a Heap?

Students start with a heap of rice. The facilitator removes one grain at a time and asks: is it still a heap? One grain cannot make the difference, yet eventually there is no heap. Students then try the same with “tall”, “young” and “crowd”. They create questions and enquire into whether vague words have exact boundaries.

Learning outcomes

By the end of the session students can:

- explain the sorites puzzle;
- identify vague words;
- reason about boundaries;
- reach a group judgement.

KEY WORDS

vague · heap · boundary · sorites · paradox · meaning

CURRICULUM LINKS

Maths: estimation and counting.
English: precise and vague language. Science: classification.

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)

- A bag of rice
- Vague word cards
- 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	Remove grains from a heap of rice one by one.	<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>"When does a heap stop being a heap?"</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)

Propose a solution to the heap puzzle and defend it.

ACTIVITY 03 · FACILITATOR NOTES

The philosophy in brief

The sorites paradox, from the Greek word for heap, is usually traced to the ancient philosopher Eubulides.

Philosophers still debate whether vague words have hidden sharp boundaries or none at all.

Common ideas to listen for

- “There must be an exact number.” Nobody can say it.
- “Vague words are useless.” We use them successfully every day.
- “This is just a trick.” It is a real puzzle.

Adapting the activity

Support

Try one vague word.

Stretch

Ask: should the law use exact ages or vague words?

WORKSHEET 1

Our questions

Name: _____

Class: _____ Date: _____

Write questions the stimulus makes you wonder about.

Our questions

Question	Who asked	Votes

WORKSHEET 2

Vague words

Explore.

Vague words

Word	Clear case	Unclear case
Heap		
Tall		
Young		
Crowd		

WORKSHEET 3

Last words

Before and after.

Do vague words have exact meanings? 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

When Does a Heap Become a Heap? is a sample activity from the EduTrend Contents P4C Language and Meaning 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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