



EduTrend Contents

P4C · CONCEPTS AND DEFINITIONS · HIGH SCHOOL

Necessary, Sufficient or Family?

Analysing concepts with necessary and sufficient conditions and family resemblance

Ages 15–18

Level: Advanced

60 minutes

Circle and pairs · up to 30

Activity 05

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

ACTIVITY 05 · AT A GLANCE

Necessary, Sufficient or Family?

Students learn two tools. A necessary condition is something required (you must be a human to be a teenager); a sufficient condition is enough on its own. They try to state necessary and sufficient conditions for “art”, “friend” and “chair”, and find counter-examples. Then they meet Wittgenstein’s idea of family resemblance: members of a concept overlap like family features, without one shared essence.

Learning outcomes

By the end of the session students can:

- define necessary and sufficient conditions;
- apply conditions to concepts;
- evaluate conceptual analysis;
- explain family resemblance.

KEY WORDS

necessary · sufficient · condition ·
essence · family resemblance ·
analysis

CURRICULUM LINKS

Philosophy: conceptual analysis.
Maths: logic of conditions. Art:
what counts as art.

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)

- Concept cards
- Conditions table
- 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 05 · 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
0–10 min Stimulus	Introduce the two tools and the concept cards.	<i>"What did you notice?"</i>
10–22 min Questions	Students create questions in pairs and vote on one.	<i>"Which question is most interesting to talk about?"</i>
22–52 min Enquiry	Enquire into the chosen question, building on each other's ideas.	<i>"Do all concepts have necessary and sufficient conditions?"</i>
52–60 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)

Analyse one concept with both tools and argue which fits better.

ACTIVITY 05 · FACILITATOR NOTES

The philosophy in brief

Conceptual analysis tries to state necessary and sufficient conditions for applying a concept.

Wittgenstein suggested that many concepts are held together by overlapping similarities, which he called family resemblances.

Common ideas to listen for

- “Necessary and sufficient mean the same.” They differ.
- “If analysis fails, the concept is empty.” It may work differently.
- “Family resemblance means anything goes.” Similarities still matter.

Adapting the activity

Support

Start with “chair”.

Stretch

Analyse a concept from another subject.

WORKSHEET 1

Our questions

Name: _____

Class: _____ Date: _____

Write questions the stimulus makes you wonder about.

Our questions

Question	Who asked	Votes

WORKSHEET 2

Conditions

Analyse.

Conditions

Concept	Necessary?	Sufficient?	Counter-example
Art			
Friend			
Chair			

WORKSHEET 3

Last words

Before and after.

Is family resemblance a better account of concepts? 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

Necessary, Sufficient or Family? is a sample activity from the EduTrend Contents P4C Concepts and Definitions programme (high school, level: advanced). 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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