

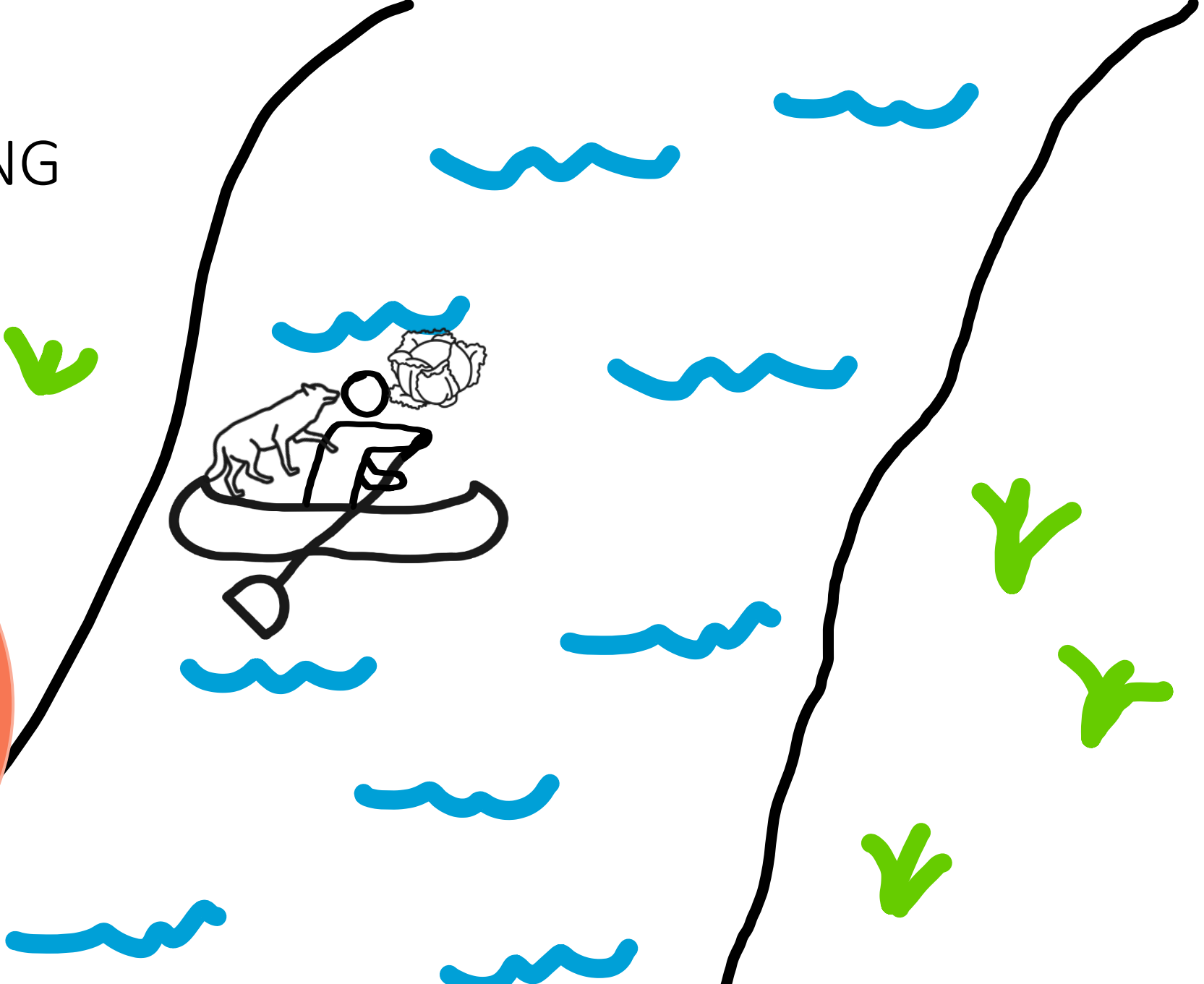
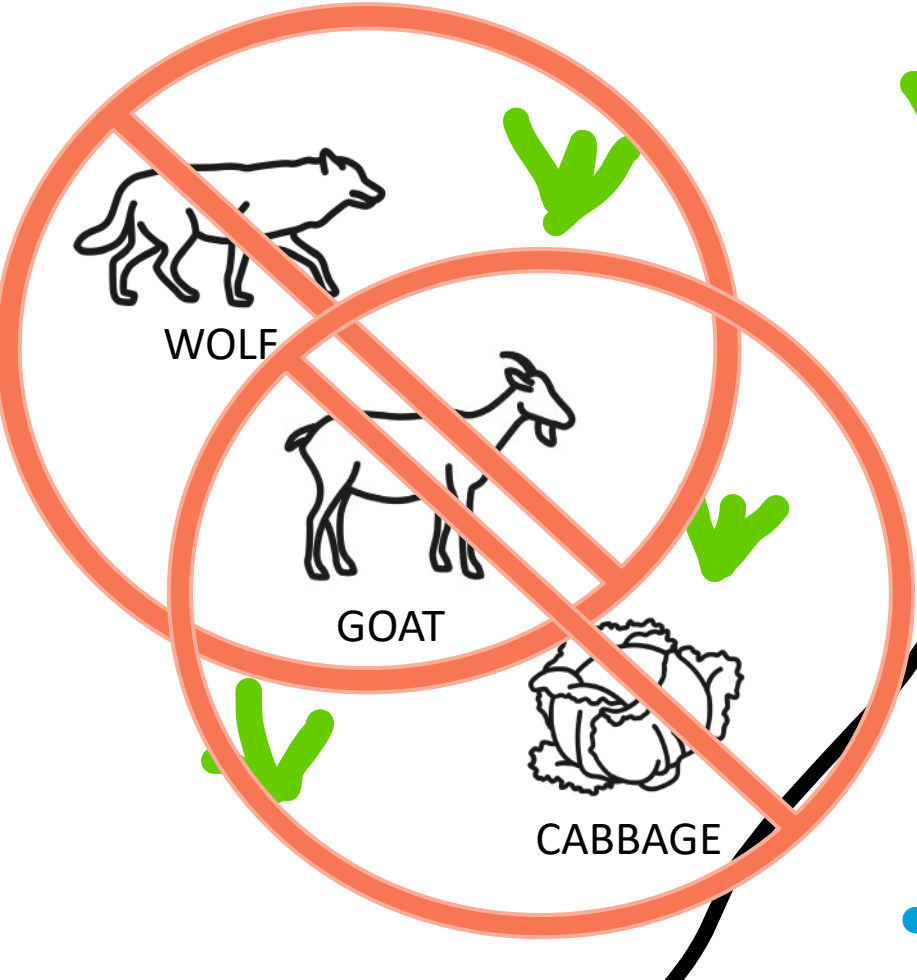


CRITICAL THINKING AND THE SCIENTIFIC METHOD

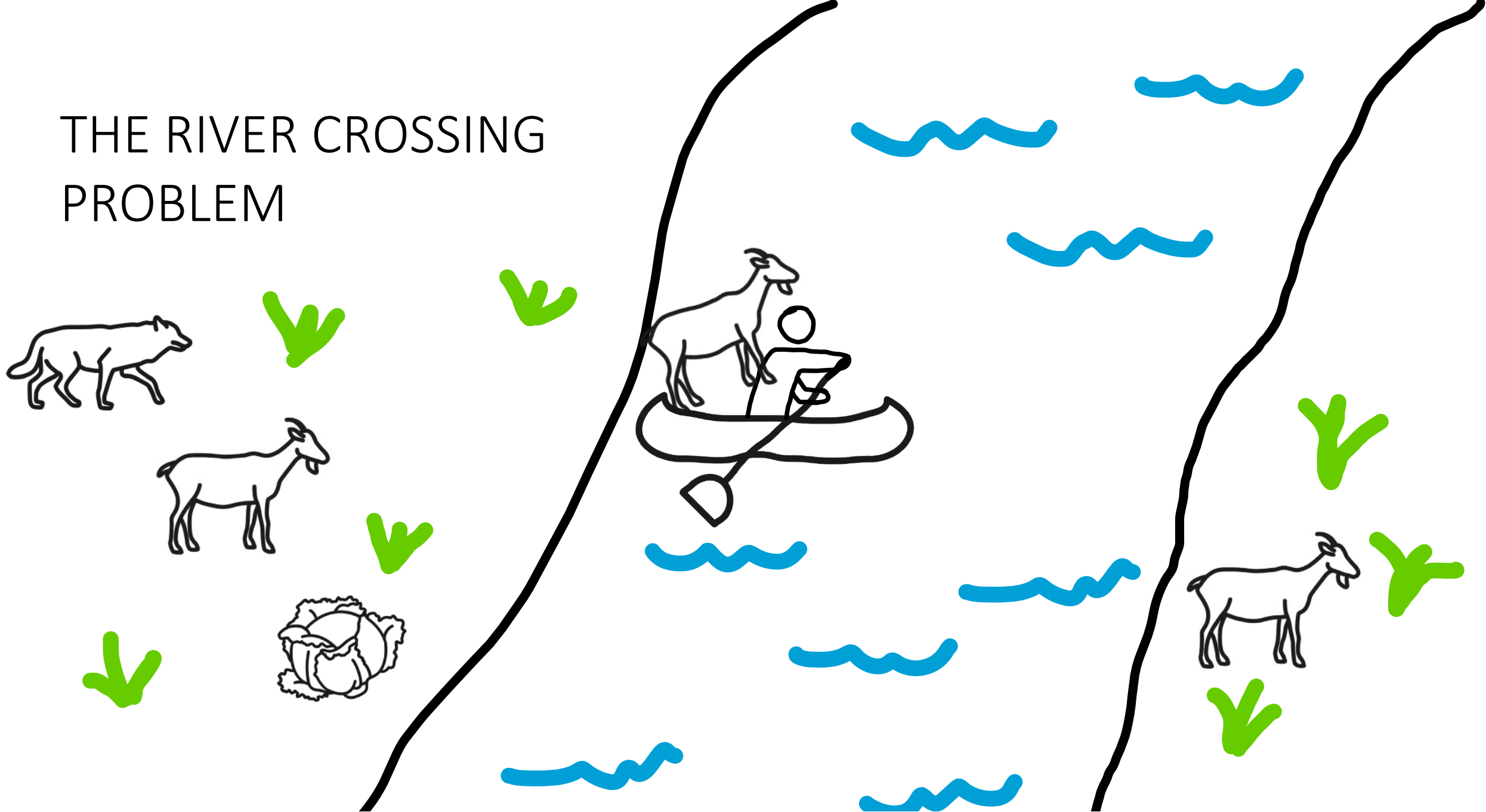
RMAIS/SERP WEEK 2

ELIZA CLARK

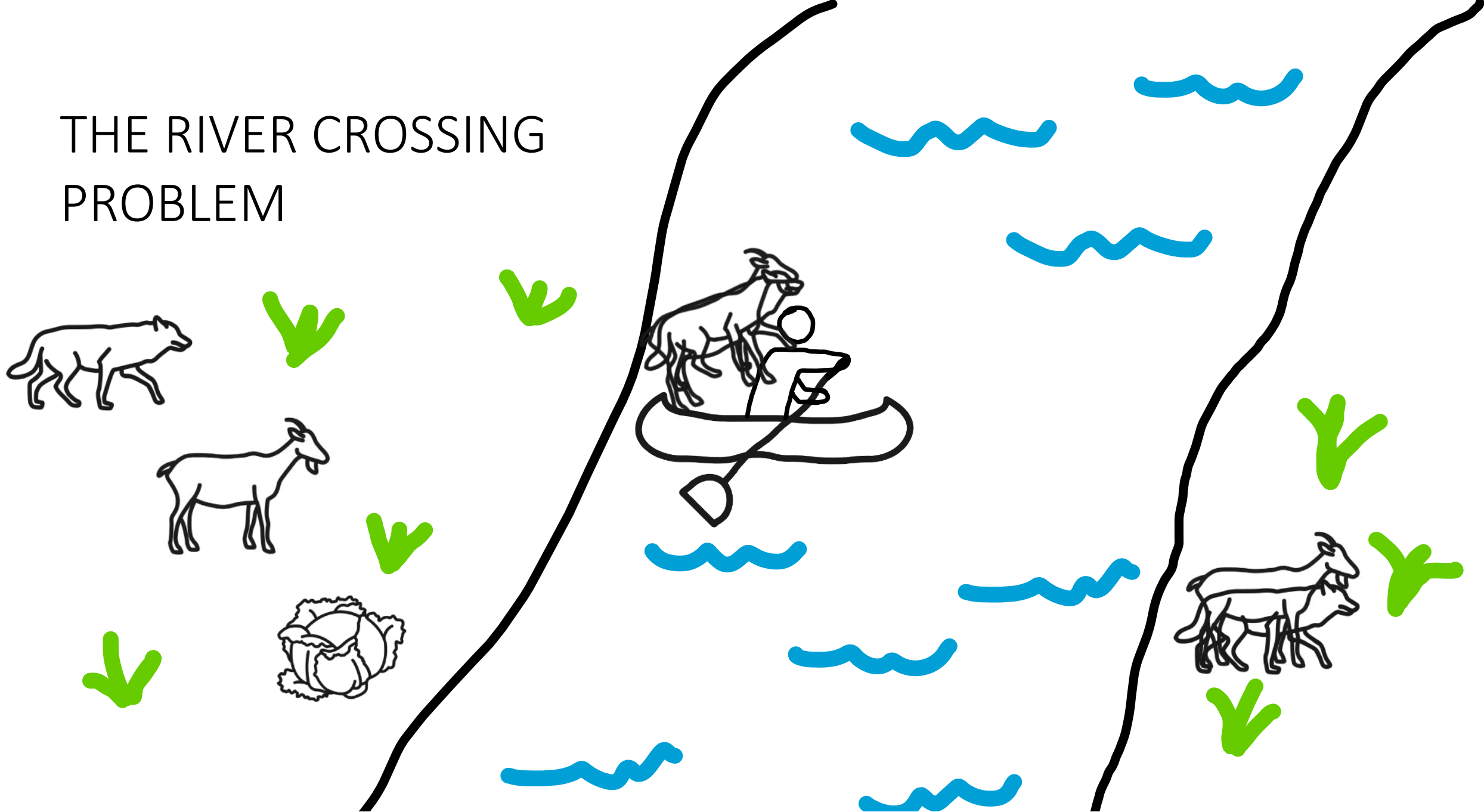
THE RIVER CROSSING PROBLEM



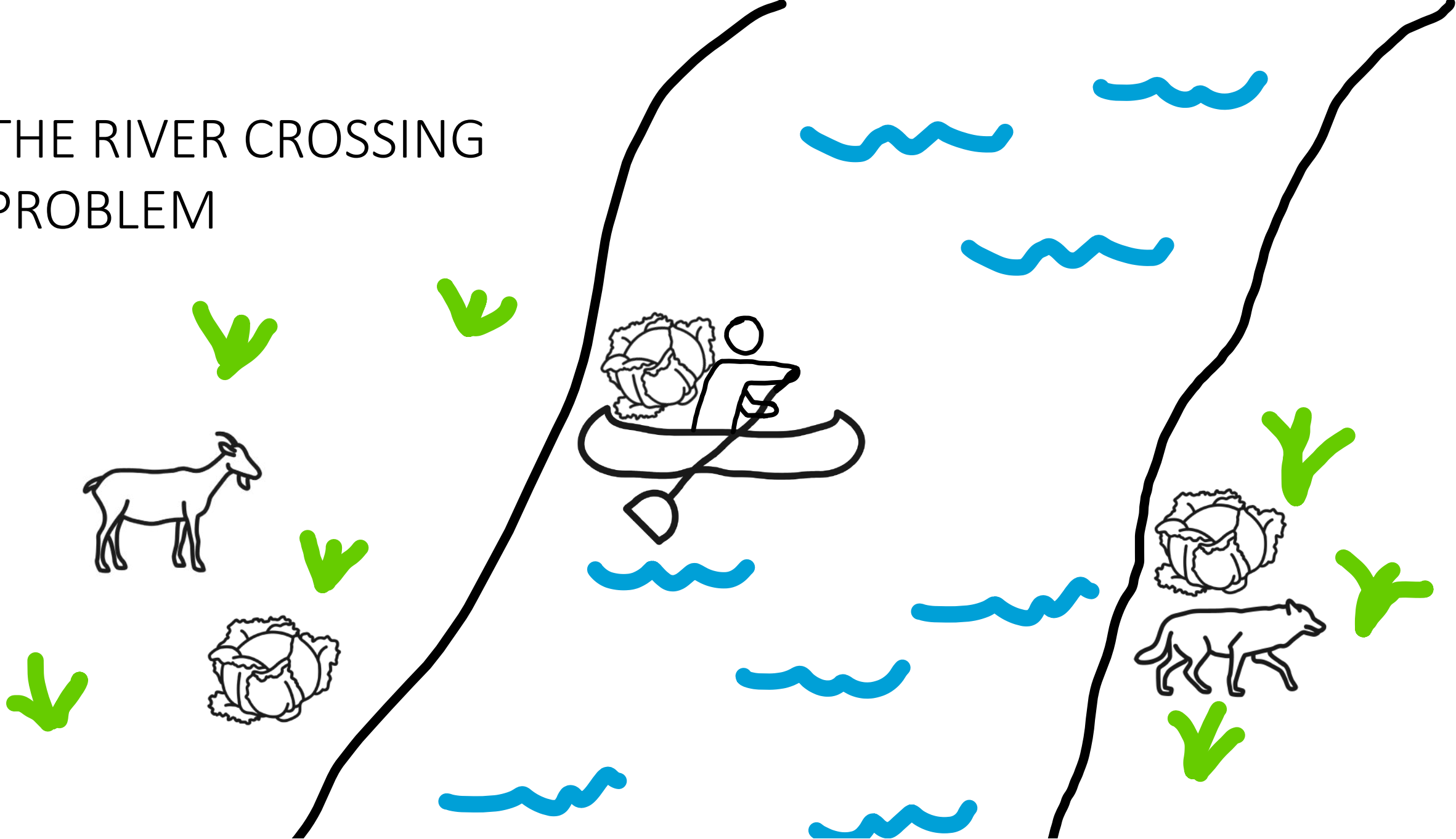
THE RIVER CROSSING PROBLEM



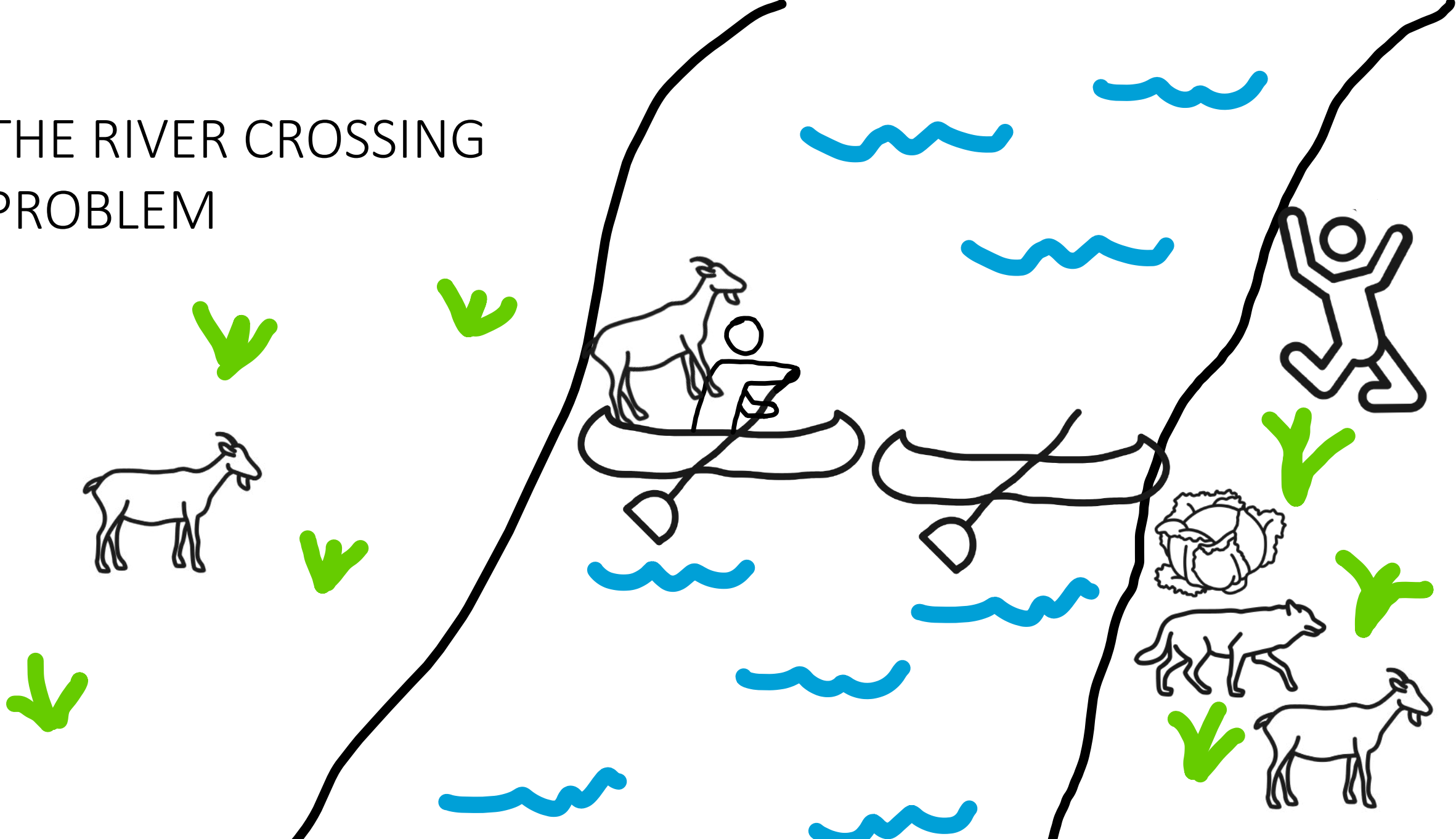
THE RIVER CROSSING PROBLEM



THE RIVER CROSSING PROBLEM



THE RIVER CROSSING PROBLEM



How did you first approach this problem?

What were your methods to solve it?

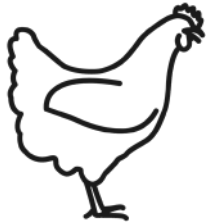
How did your team work together?

How did you feel during the process?

EUROPEAN VARIATION



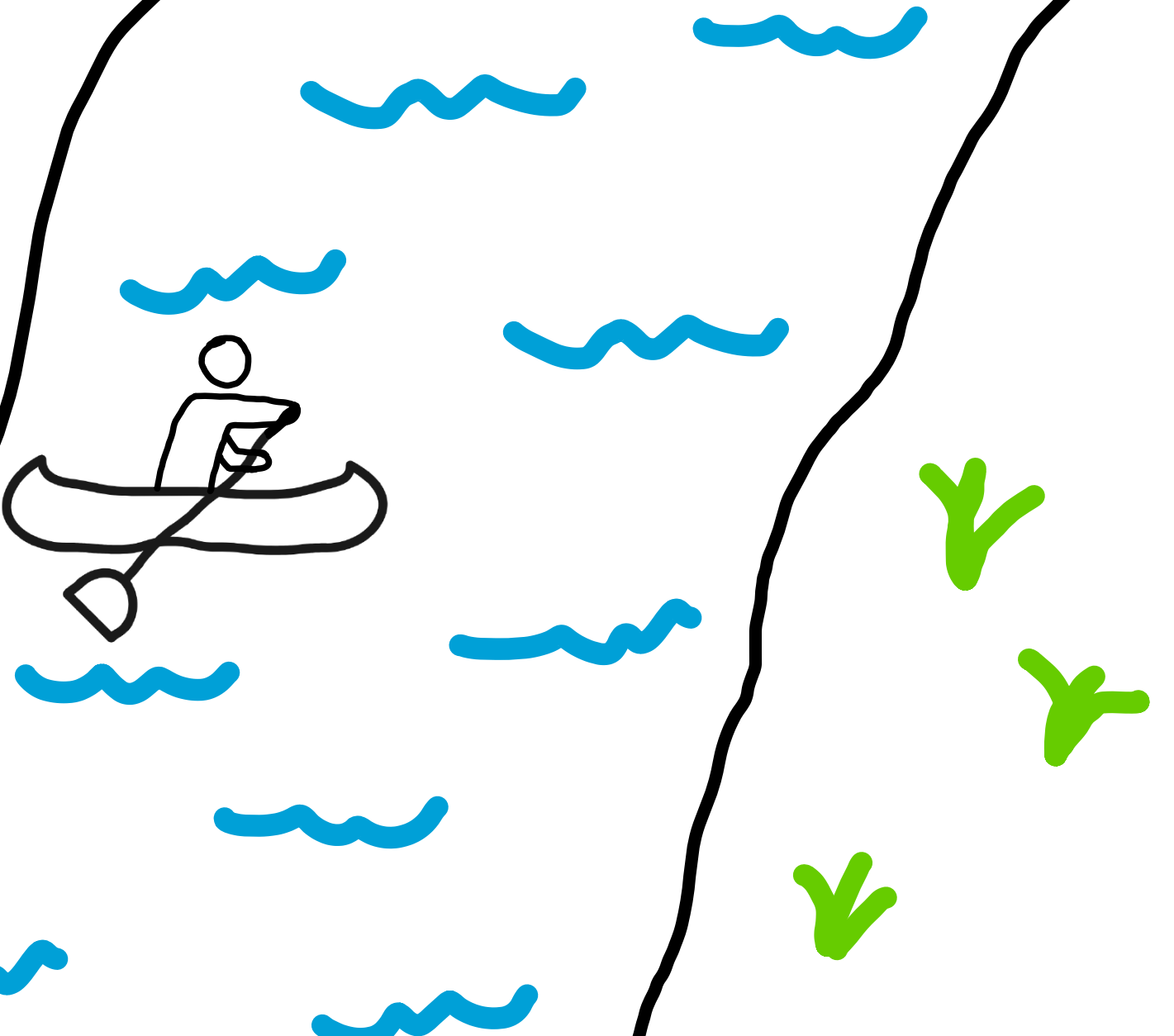
FOX



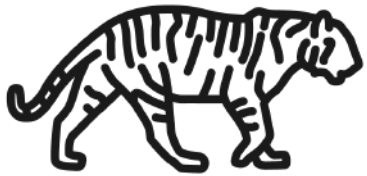
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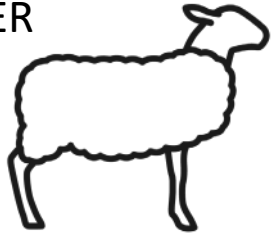
CORN



AFRICAN VARIATIONS



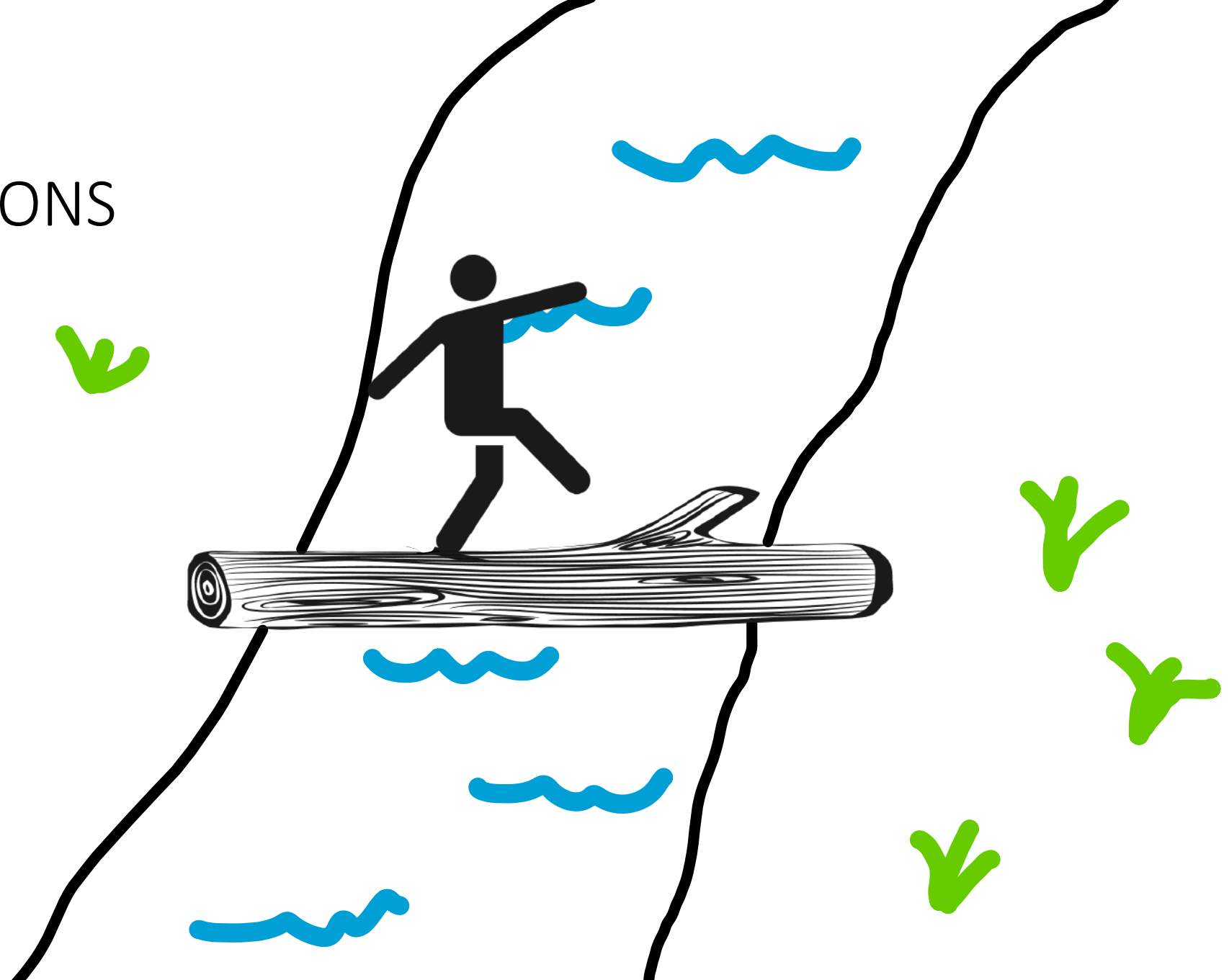
TIGER



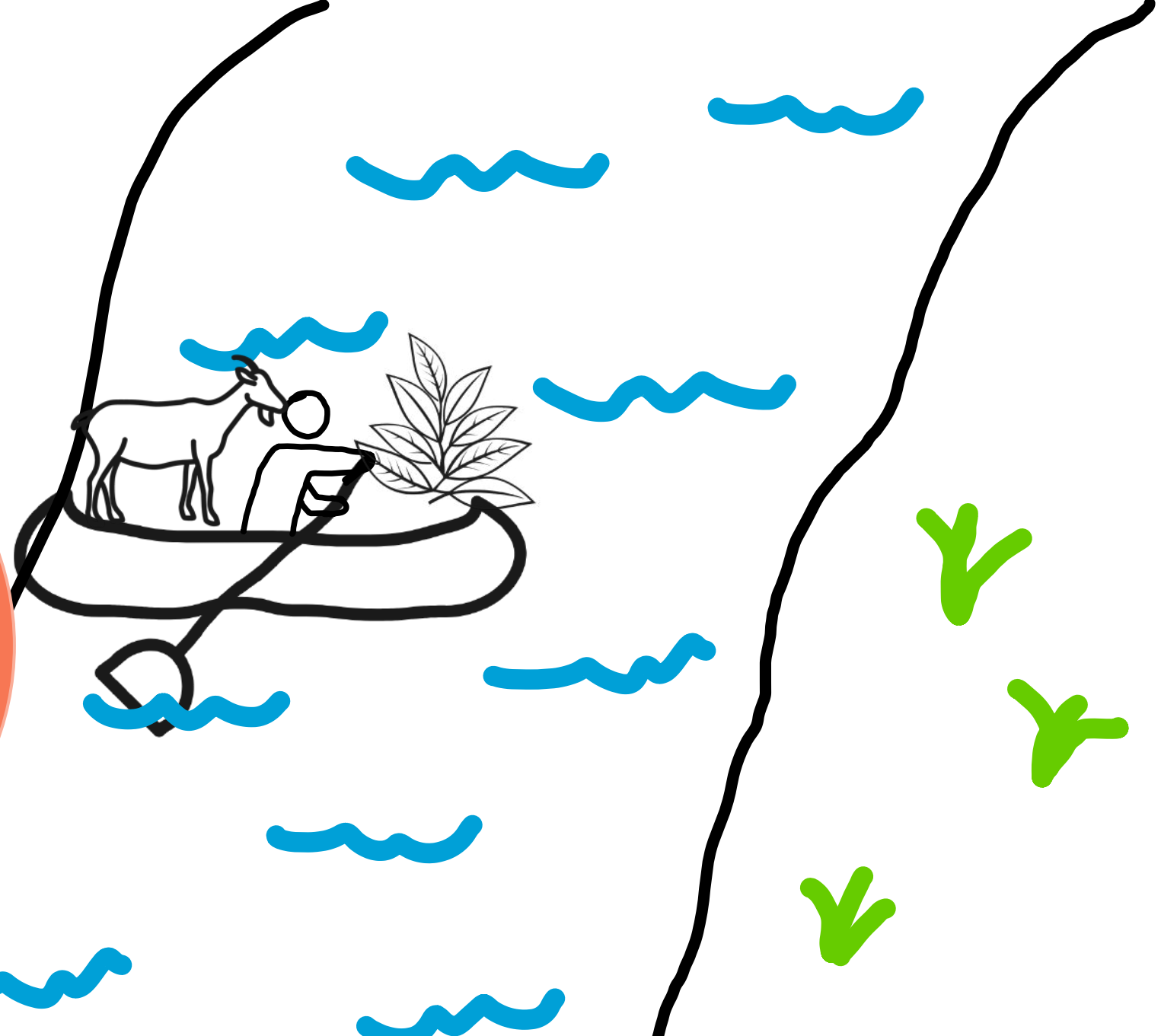
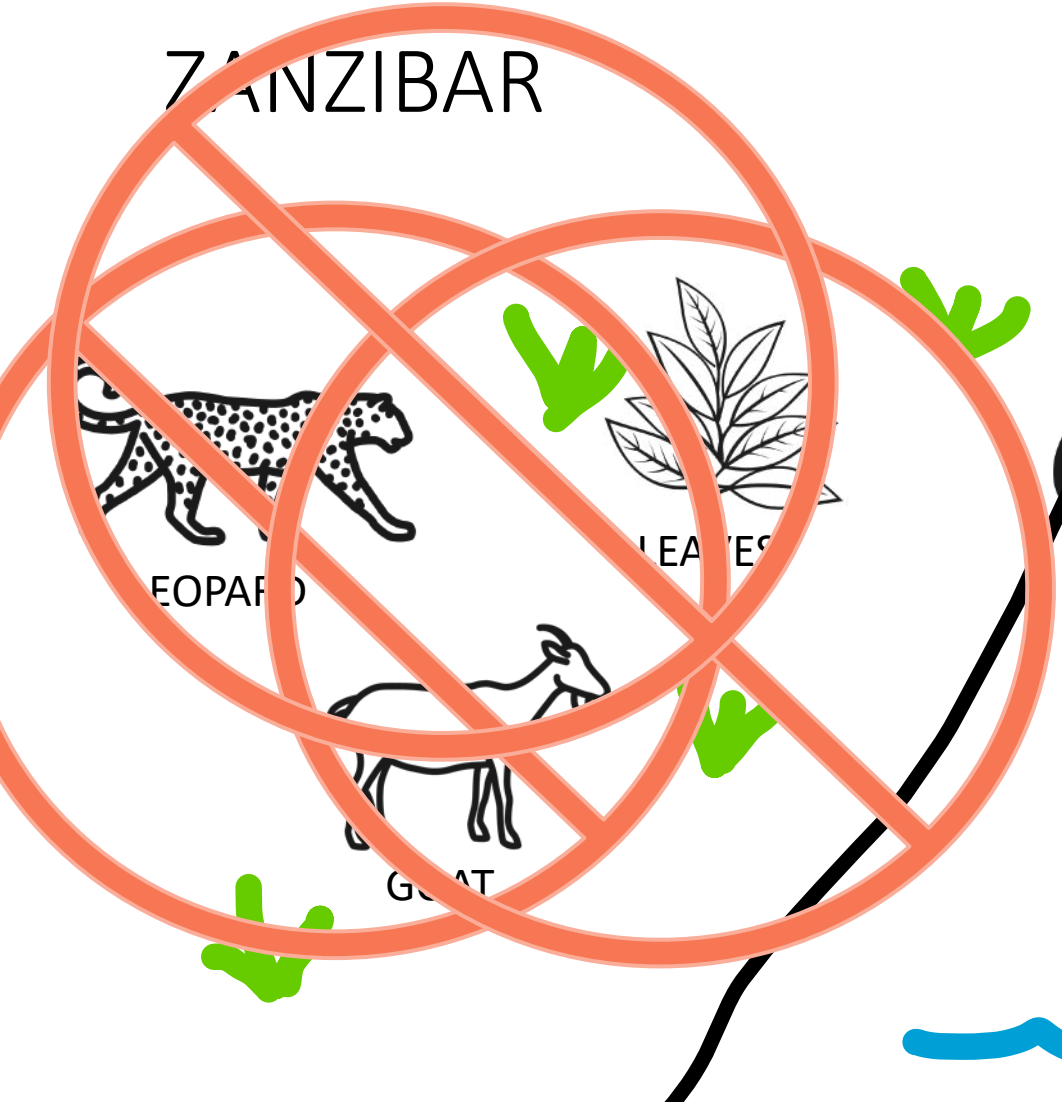
SHEEP



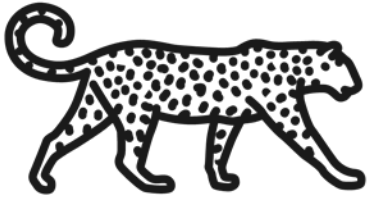
REEDS



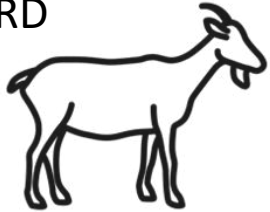
AFRICAN VARIATIONS - ZANZIBAR



AFRICAN VARIATION - ZAMBIA



LEOPARD



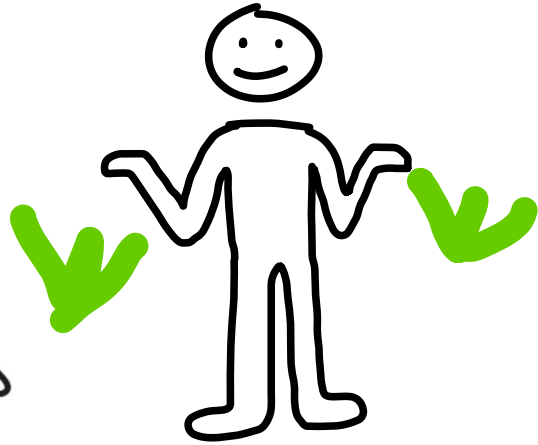
GOAT



RAT



CORN



TRUTH

Thinking

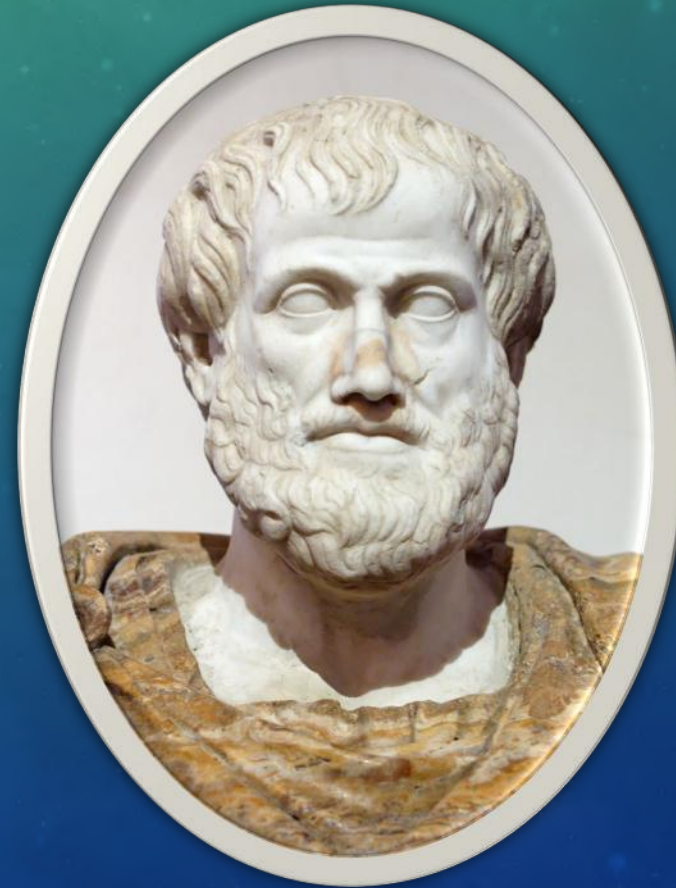
Feeling

Culture

THE BEGINNING OF A SCIENTIFIC METHOD

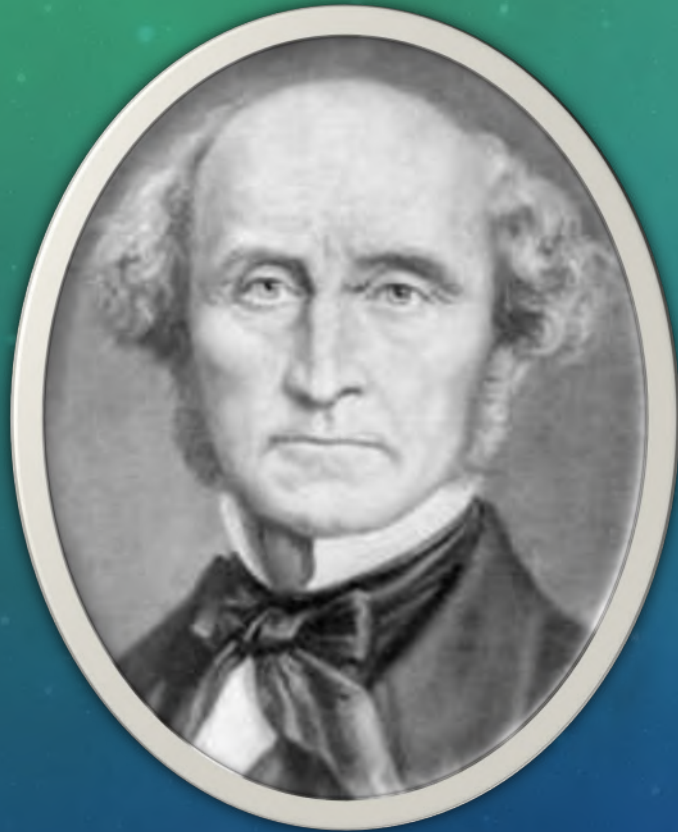


Plato – Deductive reasoning

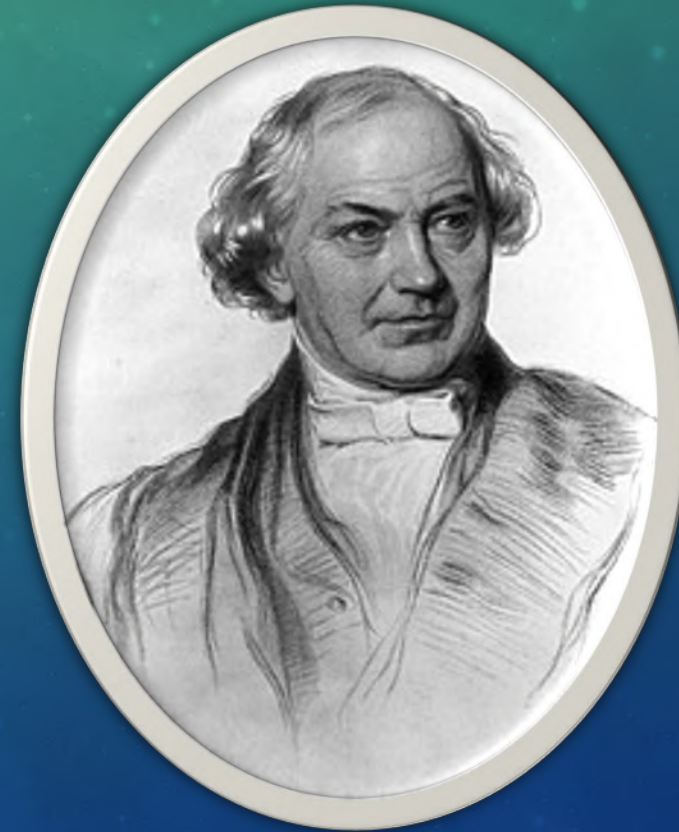


Aristotle – Observation and Logic

MORE DEBATES ABOUT A SCIENTIFIC METHOD

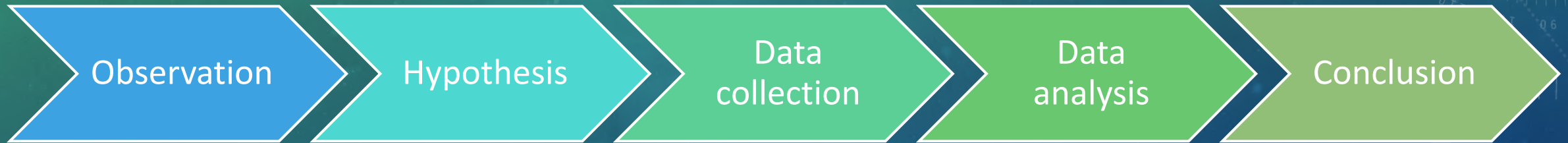


John Stuart Mill - Inductivism

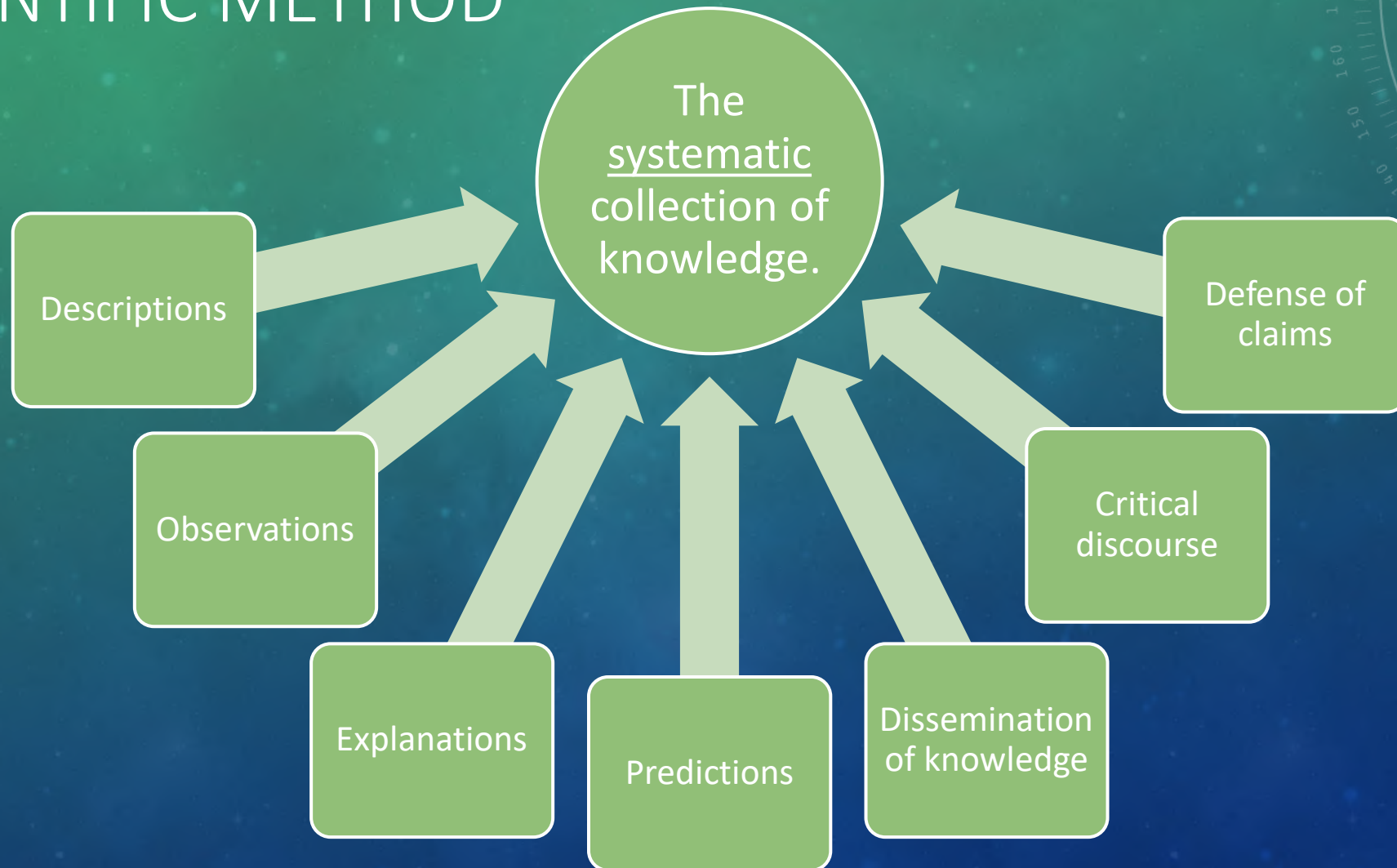


William Whewell –
Hypothetico-deductivism

A SCIENTIFIC METHOD



A SCIENTIFIC METHOD



WHY THINK CRITICALLY?



HOW CAN YOU FOSTER CRITICAL THINKING IN YOUR MENTORING RELATIONSHIP?

THE RIVER CROSSING PROBLEM ACROSS CULTURES

Ah-Ha moments and mathematical problem solving are universal

Riddles are fun versions of could-be real scenarios

Cultural background and experience dictates the way you see problems and attempt to solve them