Making a Prediction

USING DAIRY PRODUCTS IN A SCIENCE EXPERIMENT

ESSENTIAL QUESTION

Is my milk magic?

WHAT ARE WE LEARNING?

- How to make a prediction.
- The process of following steps to complete an experiment.
- The chemical compound of what's in our milk.

TRY THIS WITH

- Years 0-3
- Students who have an interest in experiments.
- Students who love hands on activities.

FIND

What	Compare
Read	Observe
Retell	Express

Discuss the word 'prediction' and explain that another way to describe a prediction is a thinking guess.

Distribute multiple puzzle pieces to each group.

Questions students & record answers in a shared doc.

What do you think the puzzle pieces will make? Ask "how do you know?"

Make the puzzles.

Revisit the predictions - who was right?

Create a class definition for what the term prediction.

Discuss the scientific method that the students followed.

Encourage students to think of questions that require a prediction as an answer.

Test these questions on their peers.

Explain that as a class you will follow a scientific method and conduct an experiment.

APPLY

Experiment	Focus
Perform	Cause and effect
Classify	Plan

Set up the class to complete the milk colour experiment.

Record the process in a shared document.

Predict what students think will happen when:

1. The food colouring is added to the milk?

2. The dishwashing liquid is added to the milk?

Conduct the experiment.

Record each step by photographing at each point.

Discuss the content of milk, and why it has reacted the way it has.

Repeat the experiment and ask:

1. Is there a colour that makes the milk move more than another?

2. What will happen if we add more drops of dishwashing liquid?

Discuss predictions.

Ask: Will using a different type of milk make any difference?

PRODUCE

Choose	Experiment
Solve	Justify
Consider	Predict

Set up students with the following materials:

- Milk
- Food colouring
- A plate per group
- Dishwashing liquid
- Cotton buds
- Baking soda
- Vinegar

Ask what are the different ingredients from the earlier experiment?

Agree the process, number of colours to be used, amount of dishwashing liquid.

Collect student predictions for this experiment.

Conduct the experiment.

Attempt to photograph or video the change in the milk.

Check predictions.

As a class record the experiment using the correct scientific process.

Include annotated photographs.

SUCCESS CRITERIA

Students can check they have successfully completed the task by:

- Making a prediction.
- Following a scientific method correctly.
- Explaining the process they followed to complete the experiment.

PRINCIPLES	VALUES	KEY COMPETENCIES	LEARNING AREAS	WORD BANK	KEY CONCEPTS
Learning to learn Future focus	Integrity Respect Diversity	Thinking Managing self Relating to others	Science Technology	Absorb Predict Expand Experiment	Making a Prediction Scientific Method Observations Questioning Skills