OSMOSIS EGG LAB

NAME

CLASS / DATE

01 QUESTION

How does the liquid an egg soaks in change its mass after 24 hours?

02 PREDICT BEFORE YOU MEASURE

EGG IN DISTILLED WATER WILL…

○ gain mass ○ lose mass ○ stay the same

_____

EGG IN CORN SYRUP WILL…

○ gain mass ○ lose mass ○ stay the same

_____

Write one reason on each line. Use the words "water" and "sugar".

03 VARIABLES

I CHANGE (INDEPENDENT)

_____

I MEASURE (DEPENDENT)

_____

I KEEP THE SAME (CONTROLLED) · LIST AT LEAST THREE.

_____

_____

04 MATERIALS

- ☐ 2 shell-less eggs
- ☐ Distilled water, 250 mL
- ☐ Corn syrup, 250 mL
- ☐ 2 clear cups + labels
- ☐ Balance (0.1 g)
- ☐ Spoon
- ☐ Paper towels
- ☐ Goggles and gloves

05 PROCEDURE

SAFETY Raw eggs can carry Salmonella: gloves on, never taste, wash hands and wipe the bench. Vinegar irritates eyes: splash goggles while pouring.

1 **WEIGH** Rinse gently, blot dry, record the start mass to 0.1 g. Use the same blot for both eggs. ☐

2 **LABEL AND POUR** Label cups "water" and "syrup". Pour 250 mL of each liquid. ☐

3 **SOAK** Lower each egg with a spoon. Leave 24 hours at room temperature. ☐

4 **BLOT AND REWEIGH** Lift out with a spoon, blot the same way, weigh on the same balance. ☐

5 **CALCULATE** Change = final − start. % change = change ÷ start × 100. Keep the sign. ☐

DATA AND EXPLANATION

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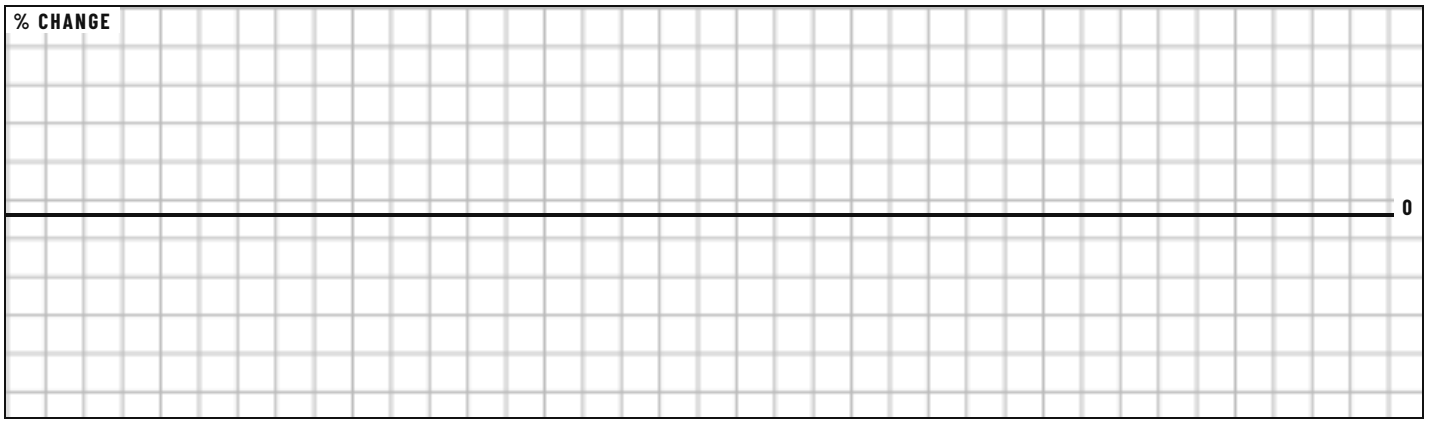
06 RECORD YOUR OBSERVATIONS

LIQUID	START (G)	AFTER 24 H (G)	CHANGE (G)	% CHANGE	LOOKS AND FEELS
Distilled water					
Corn syrup					

% change = (final − start) ÷ start × 100 · keep + or − · record your own numbers, do not copy an example.

SHOW ONE CALCULATION

07 GRAPH YOUR % CHANGE



Draw a bar for each liquid. Put 0 on the middle line. Label the axis. X: LIQUID

08 EXPLAIN IT WITH EVIDENCE

CLAIM

EVIDENCE

REASONING

Reasoning must use: water · sugar · membrane · net movement

09 THINK FURTHER

If the syrup egg is moved into plain water, what will happen and why?