

# Worksheet: Reaction Rate Measurements



**Q1:** Which of the following is not a viable unit for a reaction rate?

A t/d

B kg/s

C g/s

D h/s

E M/min

**Q2:** The rate of a reaction can be determined by measuring changes in the physical properties of the reaction mixture. Which of the following parameters is not typically monitored to obtain a measure of reaction rate?

A Cloudiness

B Color

C Volume

D Temperature

E Mass

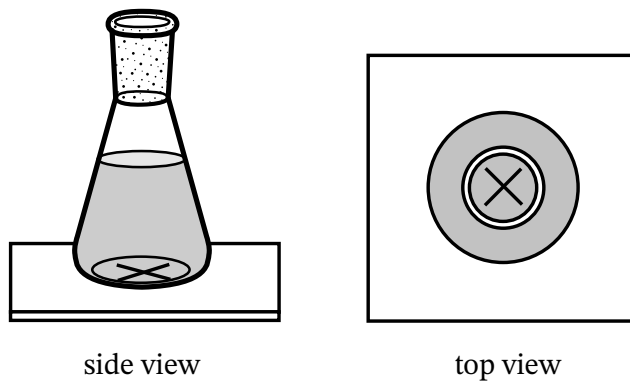


Question Video

**Q3:** What is the formula for calculating the rate of a reaction from the reaction time and the amount of product formed?

- A Rate of reaction =  $\frac{\text{time}}{\text{amount of product formed}}$
- B Rate of reaction =  $\frac{\text{amount of product formed}}{\text{time}}$
- C Rate of reaction = amount of product formed  $\times$  time
- D Rate of reaction =  $\frac{\text{amount of product formed}}{\text{time}} \times 100\%$
- E Rate of reaction =  $\frac{\text{time}}{\text{amount of product formed}} \times 100\%$

**Q4:** Shown in the diagram is the experimental apparatus used to identify the end-point of a reaction from changes in turbidity. The average reaction rate is determined by measuring the time taken for the cross to be obscured by the product suspension.



When monitoring changes in turbidity, the cross must be viewed from directly above. How does this approach help to ensure that the experiment is repeatable?

- A The cross is viewed over the largest possible area.
- B The cross is not viewed through glass, which would reduce its visibility by adhering to the solid product.
- C The cross is not viewed through glass, which would reduce its visibility by refracting light.
- D The cross is viewed through a constant depth of liquid.
- E The cross is viewed through a minimum depth of liquid.