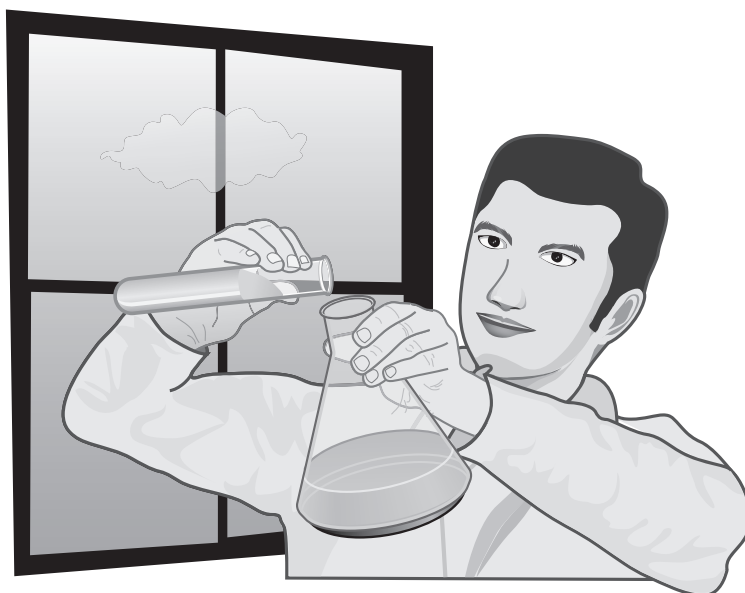


Worksheet 12.5

Silver halides

Harsha adds some silver nitrate (AgNO_3) solution to a sodium chloride (NaCl) solution. He notices a white precipitate. He leaves the test tube in bright sunlight. The precipitate turns dark.



1 a What colour is the sodium chloride solution?

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b What is meant by 'precipitate'?

.....

c What is the name of the precipitate made?

.....

2 a Write a word equation for the reaction.

.....

b What is the state symbol for a solution in water?

c What is the state symbol for a precipitate?

d Write a symbol equation for the reaction, including the state symbols.

.....

- 3 a Harsha adds some silver nitrate to three more solutions, A, B and C. He puts the results in a table. Put a tick (✓) in the column if there was a halide present; put in a cross if there was not. Name any precipitate formed.

Solution	Observation	Observation after leaving in sunlight	Halide present? / Name of any precipitate
A	no reaction	no change	
B	pale yellow precipitate	went dark	
C	yellow precipitate	went dark	

- b What type of chemical reaction is the darkening of the precipitates in sunlight?

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- c What everyday activity is dependent on these reactions (though it is now being replaced by a digital process).

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