

# Chapter 11: Corrosion of Metals and their Protection

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All the following "answers" are for your reference only!  
The "best" answers are based on your actual experimental results!

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## Experiment 11.1: To find the conditions for rusting

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4.

Test tube	Has any rust occurred? (None / a little / a lot)
A	A little
B	None
C	None
D	A lot
E	A lot
F	None

5. Air.

By boiling off the air.

6. Water.

Any water in the tube is removed by calcium chloride.

Rusting needs both **air** and **water**.

Rusting happens faster in **salt solution** and in **acid solution**.

Rusting (occurs / **does not occur**) if the nail is in contact with zinc metal.

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**Experiment 11.2: Corrosion of iron nails in gel**

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5. At the point of stress, e.g. where scratched, bent or shaped.
  6.
    - (a) C, E
    - (b) D, F
    - (c) Metals above iron in the Electrochemical Series.
  7. scratched, bent or shaped, and when connected to a metal lower than iron in the Reactivity Series.
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