

# Science in Classics

## Exercises on Grammar

### Series 04

# Notation

- Errors are blue.
- Correct versions are green.
- Comments are black.
- Highlights are red.

# Error

- Insert the sample probe into the air gap between the magnet pole pieces with the probe plane is perpendicular to  $B$ .

# Error

- Insert the sample probe into the air gap between the magnet pole pieces **with** the probe plane **is** perpendicular to  $B$ .

“with” should not be followed by a verb

# Comment

- “with” is not followed by a verb:  
with the probe plane perpendicular  
to  $B$
- “such that” is followed by a verb:  
such that the probe plane is  
perpendicular to  $B$

# Correction

- Insert the sample probe into the air gap between the magnet pole pieces with the probe plane ~~no~~ **verb**> perpendicular to  $B$ .

# Error

- In this experiment, there are some precautions that we have to pay attention.

# Error

- In this experiment, there are some precautions **that** we have to **pay attention**.

Pay attention **to** that.



# Correction

- In this experiment, there are some precautions that we have to pay attention to.

# Errors

- Error may be raised by the sample probe which cannot be put exactly perpendicular to the magnetic field.

# Error 1

- Error may be **araised** by the sample probe which cannot be put exactly perpendicular to the magnetic field.

No such word.

# Comments

- Errors may arise ...
- Errors may be caused by ...

# Correction 1

- Error may be caused by the sample probe which cannot be put exactly perpendicular to the magnetic field.

# Better yet

- Error may be caused because the sample probe cannot be put exactly perpendicular to the magnetic field.

## Error 2

- **Error** may be caused because the sample probe cannot be put exactly perpendicular to the magnetic field.

“Errors” in general

## Correction 2

- Errors may be caused because the sample probe cannot be put exactly perpendicular to the magnetic field.



# Corrections

- Errors may be caused because the sample probe cannot be put exactly perpendicular to the magnetic field.

# Error

- After the experiment, there are some conclusions that we can make.

# Error

- After the experiment, there are some conclusions that we can make.

draw a conclusion

# Correction

- After the experiment, there are some conclusions that we can draw.

# Better yet

- We can draw some conclusions from the experiment.

“from” suggests logical relationship.

“after” suggests only time sequence.

# Error

- Electric currents are due to motion of charge carriers.

# Error

- Electric currents are due to  $\Delta$  motion of charge carriers.

“motion” is singular and specific;  
should carry article **the**

# Correction

- Electric currents are due to the motion of charge carriers.



# Error

- In metals, the mobile charge carriers are electrons; however, in semiconductors are either electrons or holes.

# Error

- In metals, the mobile charge carriers are electrons; however, in semiconductors ?? are either electrons or holes.

missing subject

# Correction

- In metals, the mobile charge carriers are electrons; however, in semiconductors the carriers are either electrons or holes.

# Errors

- The resistivity depends on four factors: (1) charge carrier density, (2) lattice scattering, (3) lattice imperfection and (4) impurity.

# Error 1

- The resistivity depends on four factors: (1)  $\Delta$  charge carrier density, (2) lattice scattering, (3) lattice imperfection and (4) impurity.

specific noun; missing **the**

# Correction 1

- The resistivity depends on four factors: (1) **the** charge carrier density, (2) lattice scattering, (3) lattice imperfection and (4) impurity.

## Error 2

- The resistivity depends on four factors: (1) the charge carrier density, (2) lattice scattering, (3) lattice **imperfection** and (4) impurity.

more than one imperfection

## Correction 2

- The resistivity depends on four factors: (1) the charge carrier density, (2) lattice scattering, (3) lattice imperfections and (4) impurity.



## Error 3

- The resistivity depends on four factors: (1) the charge carrier density, (2) lattice scattering, (3) lattice imperfections and (4) **impurity**.

could be many impurities

## Correction 3

- The resistivity depends on four factors: (1) the charge carrier density, (2) lattice scattering, (3) lattice imperfections and (4) impurities.

# Corrections

- The resistivity depends on four factors: (1) the charge carrier density, (2) lattice scattering, (3) lattice imperfections and (4) impurities.

# Errors

- In this experiment,  $V1$  and  $V2$  was measured at different temperature.

# Error 1

- In this experiment, *V1* and *V2* was measured at different temperature.  
subject-verb disagreement

# Correction 1

- In this experiment,  $V1$  and  $V2$  were measured at different temperature.

## Error 2

- In this experiment,  $V1$  and  $V2$  were measured at different temperature.  
more than one temperature

## Correction 2

- In this experiment,  $V1$  and  $V2$  were measured at different temperatures.



# Corrections

- In this experiment,  $V1$  and  $V2$  were measured at different temperatures.

# Errors

- Therefore, resistivity of metallic sample can then be obtained by eqn. (3).

# Errors

- Therefore,  $\Delta$  resistivity of  $\Delta$  metallic sample can then be obtained by eqn. (3).

both are specific nouns.

missing **the**

# Corrections

- Therefore, the resistivity of the metallic sample can then be obtained by eqn. (3).

# Further improvement

- Therefore, the resistivity of the metallic sample can then be obtained by eqn. (3).

repeats idea; delete one

# Further improvement

- The resistivity of the metallic sample can then be obtained by eqn. (3).

# Errors

- The thermometer and probe was put into a cup. Boiling water was poured into the cup until the sample and the thermometer are covered up.

# Error 1

- The thermometer and probe **was** put into a cup. Boiling water was poured into the cup until the sample and the thermometer are covered up.



# Correction 1

- The thermometer and probe were put into a cup. Boiling water was poured into the cup until the sample and the thermometer are covered up.

## Error 2

- The thermometer and probe were put into a cup. Boiling water was poured into the cup until the sample and the thermometer are covered up.

a past event

## Correction 2

- The thermometer and probe were put into a cup. Boiling water was poured into the cup until the sample and the thermometer were covered up.

## Error 3

- The thermometer and  $\Delta$  probe were put into a cup. Boiling water was poured into the cup until the sample and the thermometer were covered up.

specific singular noun carries the

## Correction 3

- The thermometer and the probe were put into a cup. Boiling water was poured into the cup until the sample and the thermometer were covered up.

# Corrections

- The thermometer and the probe were put into a cup. Boiling water was poured into the cup until the sample and the thermometer were covered up.

# Errors

- Steps 4 and 5 was repeated for different temperature from 0 to 100 deg C.

# Error 1

- Steps 4 and 5 **was** repeated for different temperature from 0 to 100 deg C.

subject-verb disagreement



# Correction 1

- Steps 4 and 5 were repeated for different temperature from 0 to 100 deg C.

## Error 2

- Steps 4 and 5 were repeated for different temperature from 0 to 100 deg C.

more than one temperature

## Correction 2

- Steps 4 and 5 were repeated for different temperatures from 0 to 100 deg C.

# Corrections

- Steps 4 and 5 were repeated for different temperatures from 0 to 100 deg C.

# Errors

- The main error is happened when taking the reading of temperature from thermometer by visual.

# Error 1

- The main error is happened when taking the reading of temperature from thermometer by visual.

The error happened.

The error occurred.

# Correction 1

- The main error happened when taking the reading of temperature from thermometer by visual.

## Error 2

- The main error happened when taking the reading of temperature from thermometer **by visual**.

“by” should be followed by a noun



# Comment

- by visual means
- by eye
- visually

## Correction 2

- The main error happened when taking the reading of temperature from thermometer **by eye**.

## Error 3

- The main error happened when taking the reading of  $\Delta$  temperature from  $\Delta$  thermometer by eye.

these are specific nouns; need **the**

# Correction 3

- The main error happened when taking the reading of the temperature from the thermometer by eye.

# Corrections

- The main error happened when taking the reading of the temperature from the thermometer by eye.

# Better yet

- The main error is due to the thermometer reading.