

Drawing Scientifically Assignment - Teacher Edition

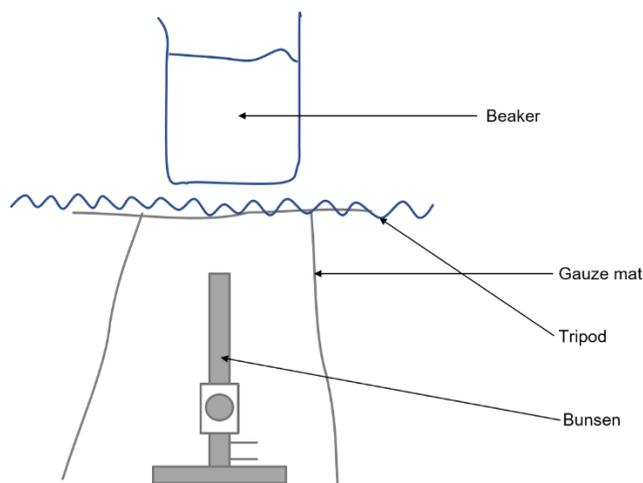
I. Fill in the gaps

Complete each sentence below to summarize the scientific drawing rules.

1. Use a _____, not _____.
2. Make drawing _____-dimensional.
3. Use _____ lines. Do not _____.
4. Keep glassware _____.
5. _____ straight lines.
6. Do not _____ or _____ in.
7. Drawings must be _____ enough to see all details clearly.
8. Do not _____ objects.
9. Label equipment with _____ lines, that do not _____ over each other.
10. Do not use _____ on labels.

II. Judge, Justify and Fix

A pair of students were heating water using a beaker, tripod, gauze mat and Bunsen burner. The diagram of their equipment set-up is pictured below.



1. Circle on the diagram the mistakes students have made. Note if the mistake has been made multiple times then you only need to circle it once.
2. Name a piece of equipment the students should have used but do not have in their drawing.

Name: _____ Period: _____ Date: _____

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3. Describe how this drawing could be improved.

4. Redraw the heating setup correctly in the space below.

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ANSWERS

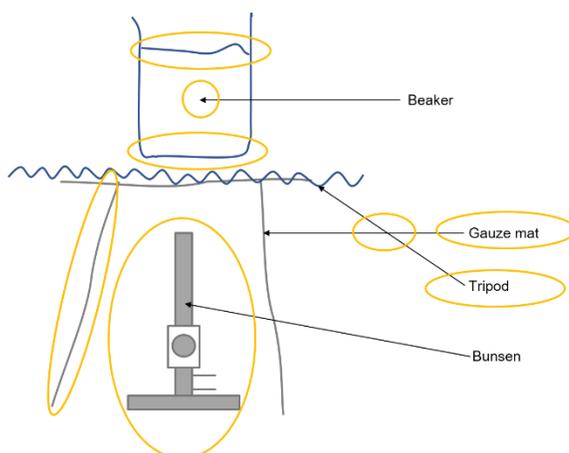
I. Fill in the gaps

Complete each sentence below to summarize the scientific drawing rules.

1. Use a **pencil**, not **pen**.
2. Make drawing **2**-dimensional.
3. Use **clean** lines. Do not **sketch**.
4. Keep glassware **open**.
5. **Rule** straight lines.
6. Do not **shade** or **color** in.
7. Drawings must be **large** enough to see all details clearly.
8. Do not **float** objects.
9. Label equipment with **ruled** lines, that do not **cross** over each other.
10. Do not use **arrow heads** on labels.

II. Judge, Justify and Fix

A pair of students were heating water using a beaker, tripod, gauze mat and Bunsen burner. The diagram of their equipment set-up is pictured below.



1. Circle on the diagram the mistakes students have made. Note if the mistake has been made multiple times then you only need to circle it once.

See diagram

2. Name a piece of equipment the students should have used but do not have in their drawing.

Heat proof mat

Name: _____ Period: _____ Date: _____

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3. Describe how this drawing could be improved.

Each piece of equipment should be drawn with a ruler so that the lines are straight e.g. tripod (except curves). The Bunsen burner should be an outline with no shading. The tripod and the gauze mat should have the correct labels and their labels should run straight and not cross over one another with no arrow heads. The beaker should be in contact with the gauze mat and should have an open top, not show water inside.

4. Redraw the heating setup correctly in the space below.

