

If you need more space
use the back of page 5.
Refer to that in your text.

Name.....

Go here and explore the simulation:

mrd123.de > BIO 7 8 > Breathing 1 L04

With your partner(s) use the simulation to design an experiment to investigate the affect of temperature on the rate of diffusion.

Title:

Date:

1. Define what you mean by _____:

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2. Write a research question using the word "affect":

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3. Identify the **independent variable** in your question:

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4. Identify the **dependent variable** in your question:

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5. Identify the **controlled variable(s)**:

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6. Write a hypothesis using an If..., then statement:

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.....

7.

Materials**Diagram 1****8. Procedure or Method** - Design an investigation to test your hypothesis.*The experiment was set up as shown in Diagram 1.*

9. **Design a data table** to record your observations.

10. Use your data to **draw a graph** (Use page 5).

Describe any patterns or relationships.

11. Write a conclusion to your experiment. *Relate this to gas exchange in your lungs.*

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12. Suggest how the experiment can be improved.

What questions remain to be answered? Outline, briefly, further experiments that could be carried out.

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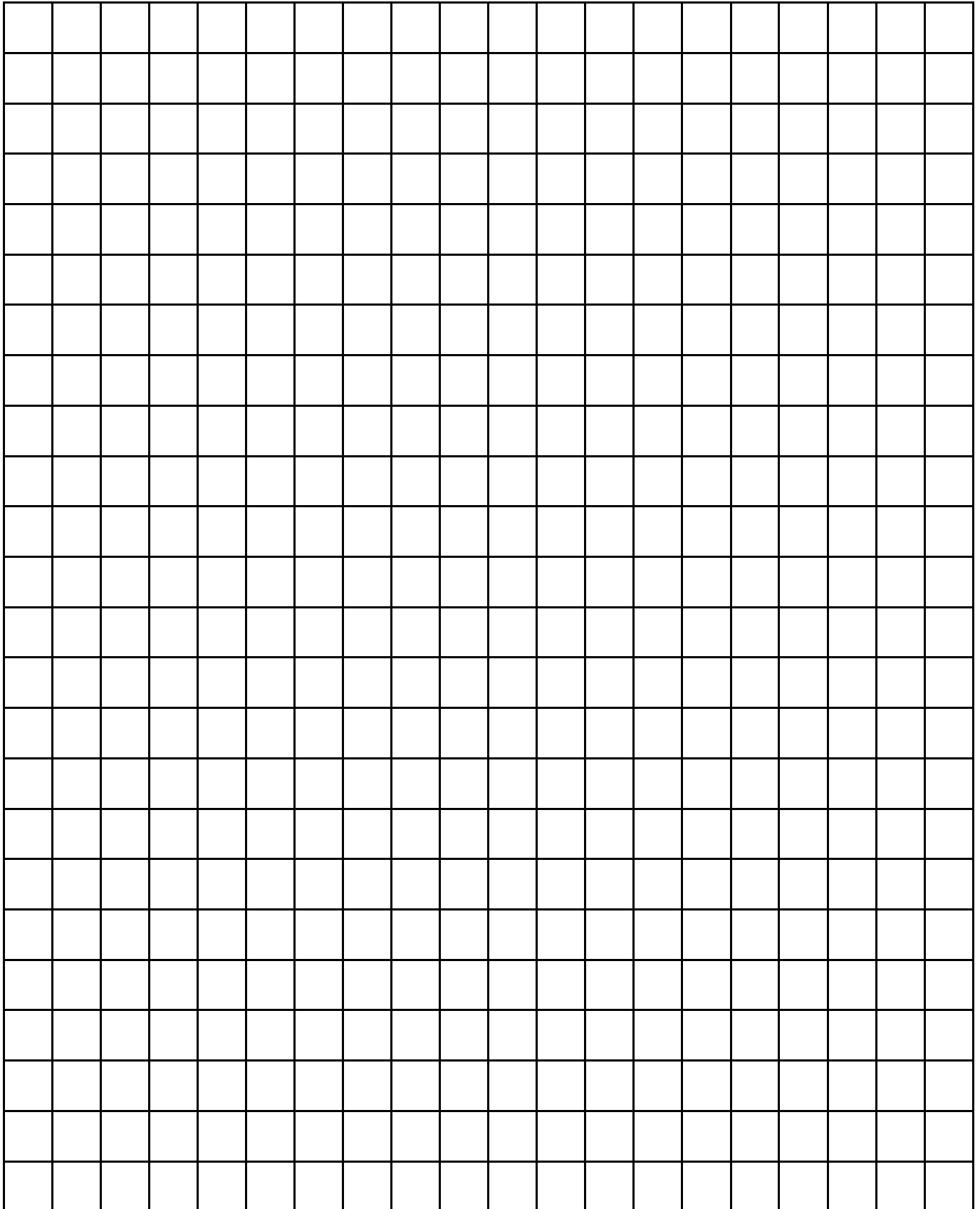
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**Check List Graphs**

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|--------------------------------|-------------------------------|------------------------------|
| 1. Large: fill the page | 2. Label axes including units | 3. Y axis Dependent Variable |
| 4. x axis Independent Variable | 5. Title | 6. Use a ruler |