

# New England Common Assessment Program (NECAP) Science Test Taking Strategies

## Tips for Teachers to Share with Students of All Grades

### Students: Preparation before the Science Assessment will help you do your best

- **Be ready.** You should be well rested and have healthy breakfast or lunch before the testing session.
- **Know how the test is scored.** You should try to answer every question. The NECAP Science Assessment awards points only for questions with answers. So, no question should go unanswered. If you skip a question, you have no chance to earn any points for the question. Wrong answers do not count against you more than questions left blank.
- **Take your time.** You should use all the time that is available to you. Read questions thoroughly. If you are struggling with a question, make your best guess and move on to the next. Before you move on, somehow record the question you need to re-check. For example, you might circle the number of the question on your answer sheet or make note of the question number on your scratch paper. When you have finished this section, as long as the session has not ended, return to take a second look at the questions you noted.
- **Know how much time you have.** You should know how much time is allotted for each session. For the NECAP Science Assessment, there is plenty of time for you to work on within each testing session. Check with your teacher if you have a question about how much time is available.
- **Use support or reference materials if they are permitted on the test.** You should be aware of and use permitted resources. These could include a reference sheet, map, table, word bank, or other support materials. It is important that you use the specific support materials that have been created for the NECAP Science Assessment. Your teacher will explain these to you. A reference sheet is provided for Grades 8 & 11. The reference sheet may include information like formulas and other relevant data for several questions. For some questions a word bank is included. Please refer to the word bank as needed. Do not use any materials not permitted.
- **Use scratch paper.** You should use scratch paper to help you figure out answers to the test questions. You may find scratch paper helpful to work out math problems, draw a diagram to help you understand the concept, or draft your answers to a constructed response. Any scratch paper used during the NECAP Science Assessment will be collected. Your name must be on the scratch paper, but no score will be given for anything on the scratch paper.
- **Know where to write your answers.** You should take care that your answers are in the proper place in the Student Answer Booklet. No credit is given for work found on your scratch paper or in your Student Test Booklet. For constructed responses, make sure your answer is completely within the answer box. Information outside the boxed area will not be scored.

## Question Types

### Multiple Choice (MC) Questions

1. Read the question and underline or circle words of importance.
2. Look at any non-text features such as pictures, diagrams or graphs that may be part of the question.
3. Look at the four possible answers. Decide if there are one or two choices you know are wrong and eliminate them from consideration. When you can get rid of two possible choices, you have increased your odds of getting the right answer.
4. Use your best judgment to choose between the remaining answers.
5. Mark your selected answer on the corresponding place in the Student Answer Booklet.
6. Read the question one last time. Check to see that the answer still make sense.
7. Make sure to remove all extra marks in your Student Answer Booklet – other than your answers. The answers for MC questions will be scanned electronically. Extra marks may throw off your scores.

### Constructed Response (CR) Questions

1. Read the entire question. Be sure you know how many parts are there to answer. If you see *part a* and *part b* in the question, you have two items to answer.
2. Underline or circle words like *explain*, *describe*, or *use data*. These give you clues as to the type and depth of answer that is expected.
3. Look at any non-text features such as pictures, diagrams or graphs that may be part of the question. Check the reference sheet or other materials provided if they apply to the question.
4. Construct your answer, making sure that you have addressed the questions being asked.
5. Consider if a table, graph, bulleted list or labeled diagram could help you answer the questions more completely. These elements are permitted in CR responses to help support your answers. Make sure any graphs, tables, or diagrams you have created contain labels and titles.
6. Fit your answer in the space provided in your Student Answer Booklet.
7. Do not leave a constructed response question blank. Since CR questions are worth four points, it is important that you try to answer each question. A score of 1 or 2 is always better than a score of zero. Try to write a relevant answer even if you cannot answer all parts of the question.

### Inquiry Tasks (IT)

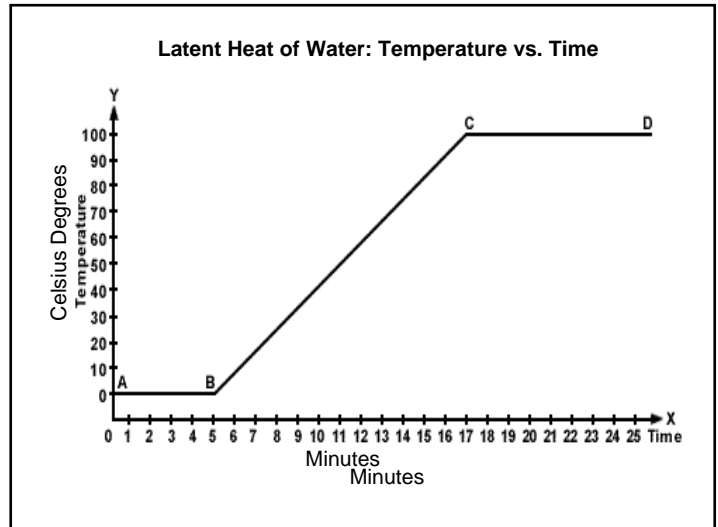
1. Be sure you understand that the Inquiry Task on the NECAP Science Assessment
  - is given in a separate session.
  - contains 7 or 8 questions, related to a scenario (story), that you answer on your own.
  - is either a hands-on investigation done collaboratively (Grades 4 and 8) or an analysis task done individually (Grade 11).
  - has both short answer (two points) and CR questions (three points).
  - requires you to graph data.
2. Follow the test taking strategies for CR questions (see above). These include reading the questions carefully; using permitted resources; using scratch paper to draft answers; checking to see if your response is logical; and, including diagrams and other graphics to support your answers.
3. Make sure to transfer the data from the hands-on investigation (Grades 4 and 8) to your Student Answer Booklet.
4. Do not skip questions since several questions may be related. Try your best to answer each question.
5. Fit your answer in the space provided in your Student Answer Booklet.

## Non-Text Elements

On the NECAP Science Assessment you may be required to or you may choose to answer questions using graphs, diagrams, lists, tables and charts. These non-text elements must fit completely within the given space in the Student Answer Booklet. The following are tips for using non-text elements as part of your answers.

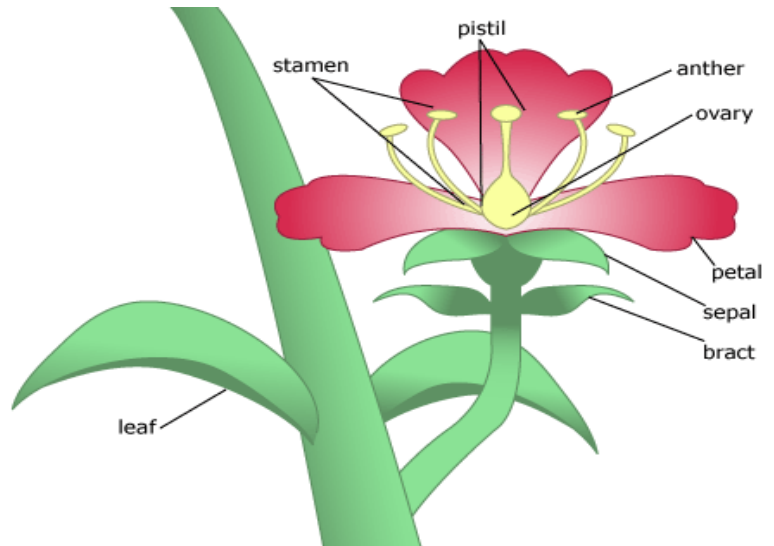
### Graph Elements

- Select a graph which best shows the data.
- Make sure that any graph you use or make has a title.
- Label the elements which are being graphed.
- Use and label a scale for the relationship.
- Include a key if needed.
- Graph the independent (not changing) variable on the **x axis** and the dependant (changing) variable on the **y axis**. **Example: when graphing change in temperature over minutes...the time is the x (not changed) and the temperature is the y axis (changing)**



### Diagram Elements

- Give a title to any diagram or drawing you use.
- Locate the title above or below the diagram or drawing
- Label any pertinent parts.
- Make sure the labels are connected in some way to the part they are naming. Use a connecting line or locate the label on the part.
- Use words and phrases to help complete your answer.



Flowering Plant

### Bulleted List Elements

- Use bullets to make parts of your list stand out.
- Label or title your list so that the person reading it will know why you have used it.
- Leave room for additional phrases or sentences to complete your answer.

## Chart /Table Elements

- Organize your information using a table or a chart
- Label the chart or table.
- Make sure the columns in both tables and charts have headers (labels).
- Label the rows in charts.

<b>Daily Weather Chart</b>			
<i>Date</i>	<i>Average Wind Speed (mph)</i>	<i>Rain (inches)</i>	<i>Temperature (degrees C/F)</i>
4/12/08	7	0.00	42/5.5
4/13/08	8	0.25	50/10
4/14/08	10	1.25	38/3.3

<b>Diameter of the Planets Table</b>	
<b>Planet</b>	<b>Diameter</b>
Mercury	3,100 miles
Venus	7,500 miles
Earth	7,926 miles
Mars	4,218 miles
Jupiter	89,400 miles
Saturn	75,000 miles
Uranus	32,3000 miles
Neptune	32,300 miles