**Scientific Literacy Survey**

**What the Survey Measures:** This survey measures your utilitarian scientific literacy in two categories: 1) Knowledge of Science Facts; and 2) your Attitudes and Behaviors that may help you become a successful student and scientist. Upon taking this survey, you will immediately receive your score and results. Your score can then be compared to scores of thousands of other pre and early freshmen science majors who took this survey. This will give you an opportunity to discover your strengths and weaknesses compared to other freshmen science majors.

**How to Take the Survey:** To take this survey, click on the Scientific Literacy Survey link below. After completing the survey, a table will appear that contains your results. Please keep this screen open while you examine your results using the instructions below.

[Scientific Literacy Survey](https://morehouse.az1.qualtrics.com/SE/?SID=SV_bCohM49VIcnmFNP)

**Knowledge of Science Facts Comparison:** At the top right hand corner of the table you will see a percentage grade. This is the grade you scored in the 26 questions in Section B: Knowledge of Science Facts along with the following the 8 scientific reasoning questions (34 questions total). Almost two thousand pre and early freshman science majors have taken this survey, and the national average that students scored was 64%. How did your score compare with the national average? What do you think this means for you? For example, if your average score is lower than the national average, do you think you might need to study harder in college to catch up?

 **Attitudes and Behavior Examined:** Now please take a look at the table that contains your responses to the first 24 questions which are Attitudes and Behaviors questions (i.e. three groups of eight questions each). These Attitudes and Behavior questions are broken down into six different categories of questions: 1) Commitment to Science; 2) Confidence as a Scientist; 3) Identity as a Scientist; 4) Participation in Scientific Discourse; and 5) Team Learning. In the Attitudes and Behavior Chart seen below, all of the questions with their respective numbers have been rearranged into these categories.

 With the exception of questions number 7, 19 and 23, answering all other questions by marking “Agree” or “Strongly Agree” may be an indication that you have good attitudes and behaviors for success as a college science major and ultimately a career in science. Did you agree or strongly agree with most of the questions?

Please take a close look at how you responded to the questions in the survey and figure out in the different categories where your strengths and weaknesses may be. For example your weakness may be in categories where you did not agree or strongly agree to most of the questions.

Let’s take a closer look at how you may examine yourself and discover what you can do to improve. Relative to the category of Team Learning questions, if you did not agree to the Team Learning questions 6, 10 and 13, and you agreed with the Team Learning question 19, then this might indicate that you do not like to study in teams, and you do not feel like studying in teams is productive. In college, effective team studying can be a very important activity that increases your success. If you wish to increase your knowledge about team learning, then please pay close attention to the Study Groups section in Chapter 3, Activity 2, How to Study and Take Notes.

 After examining your Commitment to Science responses, if you feel it would have been good if you responded with more Strongly Agree responses, then when you are taking Chapter 8 Careers in STEM, please pay close attention to Activity 1, STEM Career Search. If you would like to see your Attitudes and Behaviors increase in the areas of Confidence as a Scientist and/or Identity as a Scientist, please pay close attention to all components of Chapter 12, Growth Mindset.

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| **Attitudes and Behavior Chart** |
| **Commitment to Science** | 3. I expect a career in science will be very satisfying |
| 24. I read scientific articles in newspapers, magazines or on the Internet on a regular basis, such as every week |
| 5. I will work hard to achieve a career in science |
| 8. I intend to work in a job related to science |
| *23. I do not intend to work in a career in science* |
| 17. I am committed to applying scientific information in decision-making, e.g.  ozone depletion and the use of aerosols |
| 22. I am knowledgeable about the many different career opportunities in science |
| **Confidence As a Scientist** | 1. I am confident that I will do well in a very hard science class in college |
| 9. I am confident in my ability to describe natural phenomena, e.g. the phases of  the moon |
| 11. I am confident in my ability to pose questions that can be addressed through  scientific experimentation, e.g. state a testable hypothesis |
| 14. I am confident in my ability to give examples of how scientific discoveries or ideas have affected society, e.g. the germ theory of disease |
| 16. I am confident that I can assess the validity of scientific presented on TV,  radio, magazines or the newspaper |
| 20. I am confident that I can provide a scientific explanation for a natural process, e.g. photosynthesis, digestion, combustion |
| **Identity As a Scientist** | 2. I feel like I belong in the field of science |
| *7. In general, being a scientist is not an important part of my self-image* |
| 12. I have come to think of myself as a “scientist” |
| 21. I am a scientist |
| **Participation in Scientific Discourse** | 4. I feel comfortable talking to friends and/or family about current events in science |
| 15. I talk about science with friends and/or family, other than for the purpose of learning science for a class |
| **Team Learning** | 6. Studying in teams is a productive way for me to learn |
| 10. I enjoy studying in teams |
| 13. I know how to be a good team member |
| *19. I do not study in teams* |

**Scientific Literacy Infographics:** After finishing this exercise please take a look at the Scientific Literacy Infographics which contains facts about the national Scientific Literacy Survey, as well as why scientific literacy is important. In the Scientific Literacy Center website click Resources, then Infographics, then Click Here.