

Name: _____
First Name *Last Name*

Name: _____
First Name *Last Name*

School: _____ Team Number: _____
Full School Name, No Abbreviations

PART 1 SCORE <div style="border: 1px solid black; width: 100%; height: 100%;"></div> 80 points

DYNAMIC PLANET

TECTONICS

Massachusetts State Science Olympiad, B Division
March 3, 2018

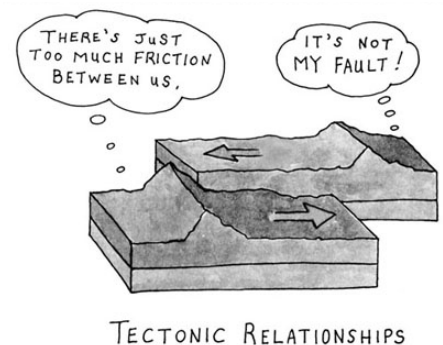
PART 1: STATIONS

INSTRUCTIONS

- By marking your name(s) on the lines above and on your Answer Sheet, **you are agreeing to the Science Olympiad Code of Ethics Students' Pledge:** "[I/We] will compete with integrity, respect, and sportsmanship towards my fellow competitors. [I/We] will display courtesy towards Event Supervisors and Tournament Personnel." The Event Supervisor can deduct points from a team's score at his discretion if the team fails to uphold the Students' Pledge.
- You are only allowed to use a calculator and four 8.5" x 11" sheets of notes during the exam. All other materials are prohibited. **No phones allowed.** You can use either pencil or blue or black pen to complete the exam.
- Make sure all answers are legible. An illegible response will be an incorrect response. Thus, **write neatly.** For single letter answers, use capital letters (e.g., *A* not *a*) to mark your responses.
- Do *not* discuss the content of this exam with anyone until after the tournament is over.
- Have fun, enjoy the exam, and rock on!

FORMAT

- **The exam is 110 points** and consists of two parts: Stations (Part 1, 80 points) and Short Answer (Part 2, 30 points).
- Part 1 consists of **ten stations**, and you have **three minutes and fifteen seconds to complete each station** (~33 minutes total). All stations have eight questions, and all questions are weighted equally (except Station 10). Part 1 is **eighty points**.
- Ties will first be broken by the highest score on Part 1: Stations section of the exam, and then by the highest score on Part 2: Short Answer section of the exam. If ties still exist, station scores from first through tenth (in order) will be used to break remaining ties.



Exam by Jeffrey Rubel • Williams College • Bain & Company • Boston, MA
Station 8 by Rishabh Gaur and William Baker • Pembroke Hill School • Kansas City, MO

STATION ONE: IN THE NICK OF TIME

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____
- 7. *Circle:* Rock 1 Rock 2
- 8. _____

STATION TWO: ANYBODY HAVE A MAP?

- 1. _____
- 2. *Circle:* East West
- 3. _____
- 4. *Circle:* Fault 1 Fault 2 No
- 5. _____
- 6. _____
- 7. *Circle:* East West
- 8. *Circle:* Fault 1 Fault 2 No

STATION THREE: A CUT ABOVE

- 1. *Circle:* True False
- 2. *Circle:* True False
- 3. _____
- 4. _____
- 5. _____
- 6. _____
- 7. _____
- 8. _____

STATION FOUR: HISTORY HAS ITS EYES ON YOU

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____
- 7. _____
- 8. _____

STATION FIVE: (M)ORE, PLEASE

1. _____

5. _____

2. _____

6. _____

3. _____

7. _____

4. _____

8. _____

STATION SIX: LAYERS, LIKE ONIONS AND OGRES

1. _____

2. _____

3. _____

6. _____

4. _____

7. _____

5. _____

8. *Deepest:* _____ *Shallowest:* _____

STATION SEVEN: CROSSING A (PLATE) BOUNDARY

1. _____

5. _____

2. *2a:* _____ *2b:* _____

6. _____

3. *Circle:* Increase Decrease Stay the Same

7. _____

4. *Circle:* Increase Decrease Stay the Same

8. _____

STATION EIGHT: DROP THE BASIN

1. _____
2. _____
3. _____
4. _____

5. _____
6. _____
7. _____
8. _____

STATION NINE: ALL OVER THE MAP

1. _____
2. _____
3. _____
4. _____
8. _____

5. _____ seconds
6. *Circle:* Brittle Ductile
7. *Fold A:* _____
- Fold B:* _____

STATION TEN: BACK TO THE DRAWING BOARD

