

KRONOSAURUS KORNER 2016 SCHOOL CHALLENGE

PART A GETTING YOUR MIND AROUND 100 000 000!

Kronosaurus Korner is Australia's top marine fossil museum. The fossils on display are from creatures that lived in or near the Great Inland Sea about 100 000 000 years ago.

When told the age of our fossils many visitors to the museum say the same thing: "Goodness 100 000 000 years! I just can't get my mind around a number that big!"

In Part A you will be asked to do just that. Part A contains four different Tasks. They all have something to do with 100 000 000. Your challenge is to do any two.

Task 1. A person is asked to tap a hand (or a foot) 100 000 000 times? Estimate the shortest time it would take them to do it.

Task 2. Identify something that will hold about 100 000 000 drops of water.

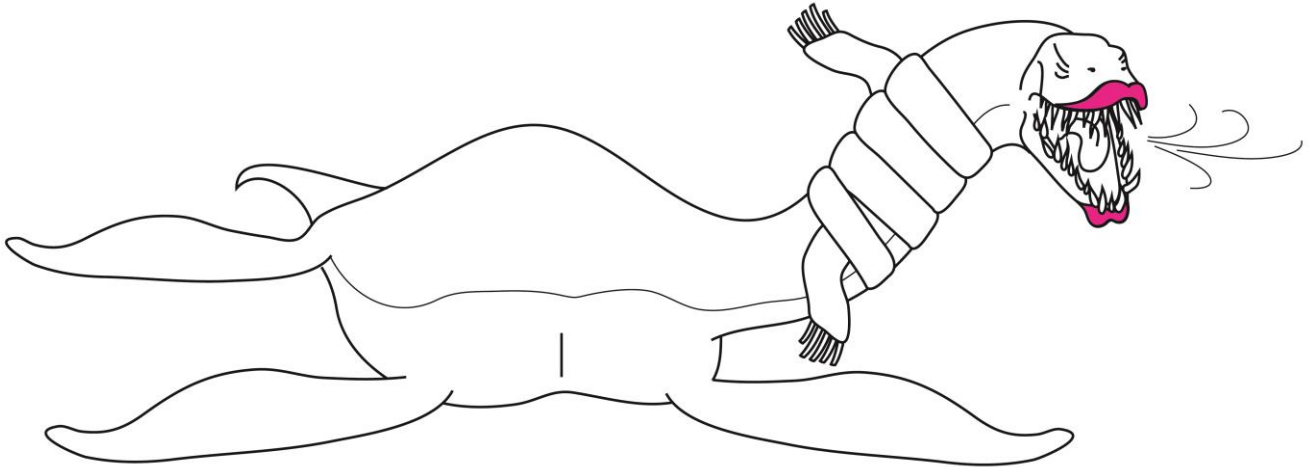
Task 3. Could your school hold 100 000 000 shoes?

Task 4. Estimate the number of people it would take to lift a bag containing 100 000 000 grains of rice.

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PART B *A HELPING HAND FOR ELLIE*

Ellie is an Elasmosaurid.



She has a bad cold. She also has a very sore throat. And everyone knows that when you are an elasmosaurid with that much throat you really don't want a sore one.

Ellie needs a neck warmer for her throat and a saltwater pool where she can recover from her cold. She also needs food to regain her strength before she is released back to the ocean that is her home.

Your Task

Write a report outlining the design and cost of materials for a custom-made neck warmer for Ellie and the estimated time needed to make it. Include Ellie's pool and food requirements, including costs.

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FOR THE CONTACT TEACHER

Thanks for showing an interest in the KRONOSAURUS KORNER 2016 SCHOOL CHALLENGE. We think that you and your students will find the Challenge a unique and valuable learning experience. It is designed to be challenging, different and most of all fun.

The tasks (like a sport) have been designed to appeal to a range of students. A wide range of outcomes are possible. That is why the same task has been assigned to teams in three grade ranges, Junior Gr 5-6, Intermediate Gr 7 and Senior Gr 8-9.

It is expected that a team will work collaboratively on the Challenge tasks and produce one team submission. A team will have no fewer than 3 members and no more than 5 members. It is expected that students will decide how they will organise themselves to work on the task and produce their joint submission. You can facilitate this.

It is left to you and your students to determine how each team operates during the 2-week period of the Challenge. Some may wish to run several meetings at lunch times, or after school. Some may wish to take on specific tasks as home assignments. Students should feel free to carry out any research they deem necessary for the project. Students should feel free to seek feedback on their ideas from non-team members. It is important, however, that a team's submission be created by team members only, using strategies, results and formats agreed to by the team.

School submissions will be assessed by team members, by you the teacher and thirdly by judges at Kronosaurus Korner. Students should be made aware of how their work will be other-assessed and self-assessed at the beginning of the Challenge. This knowledge should help them shape how they work. Students will submit a mark for their work out of 50, teachers a mark out of 50 and the judges a mark out of 100.

You will be responsible for submitting no more than one submission per level participating in your school.

If you have any questions feel free to contact us at: manager@kronosauruskorner.com.au

Best of luck!

Kronosaurus Korner 2016 School Challenge

Team Assessment Form

SCHOOL _____ Team (circle one) Gr 5-6 Gr 7 Gr 8-9

TEAM MEMBERS (print) _____

How did we do? Our Team's Score

1. We made a good plan for handling the challenge _ / 4
 2. We did a good job collecting data for our report _ / 6
 3. We double-checked all our calculations _ / 4
 4. Our report explains what we did and why we did it _ / 6
 5. We have confidence in all our conclusions _ / 4
 6. We checked our report for spelling and grammar _ / 4
 7. Our report is well written and easy to read _ / 6
 8. Our report is neat and attractive _ / 4
 9. Our report is complete _ / 4
 10. Each team member made a positive contribution to the report _ / 4
 11. Our team enjoyed the Challenge _ / 4
- TOTAL** _ / 50

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TEACHER ASSESSMENT FORM

SCHOOL: _____ TEACHER: _____

ADDRESS: _____

CONTACT: Tel _____ e-mail _____

TEAM LEVEL (circle one) Junior Gr 5-6 Intermediate Gr 7 Senior Gr 8-9

TEAM MEMBERS (print) 1 _____

2 _____ 3 _____

4 _____ 5 _____

Start Date _____ Completion Date _____

1. Initially team needed minimum level of assistance from me _ / 4
2. Team came up with a good plan of attack _ / 4
3. Team made reasonable estimates and assumptions..... _ / 4
4. Team was self-directed _ / 4
5. All members of this team made positive contributions..... _ / 4
6. Team members demonstrated good interpersonal skills..... _ / 4
7. Members demonstrated Creativity & problem solving abilities ... _ / 4
8. Team edited and refined their draft report _ / 4
9. Team members demonstrated good communication skills _ / 4
10. Team report is complete _ / 4
11. Team made good use of time _ / 4
12. This team (and teacher) enjoyed the Challenge _ / 6

TOTAL _____ / 50

Comments? Suggestions for improving this 'Challenge'? Use separate page