



California Science Center
CALIFORNIA STATE SCIENCE FAIR
2001 PROJECT SUMMARY

<p>Your Name (List all student names if multiple authors.) Lindsey Nelson</p>	<p>Science Fair Use Only</p>
<p>Project Title (Limit: 120 characters. Those beyond 120 will be ignored. See pg. 9) A Sticky Situation: Organic vs. Synthetic: Which Material Absorbs Oil the Best?</p>	<p>S0820</p>
<p style="text-align: center;">Division _ Junior (6-8) <u>X</u> Senior (9-12)</p>	
<p>Preferred Category (See page 5 for descriptions.) 5 - Earth Sciences/ Planetary Sciences/ Physical Environments</p>	
<p>Abstract (Include Objective, Methods, Results, Conclusion. See samples on page 14.) Use no attachments. Only text inside these boxes will be used for category assignment or given to your judges.</p> <p>Problem: Organic Vs. Synthetic, which material picks up oil the best?</p> <p>Materials: One Beaker, two 250 graduated cylinders, 1 150 graduated cylinder, spandex, nylon, polystyrene foam (sythtetic, wool, cotton, paper towel (organics) tweezers, Oil, Coffee Filters.</p> <p>Hypotheses: I believe that if I test the organic materials and the synthetic materials, the synthtics will be more effective.</p> <p>Procedure</p> <ol style="list-style-type: none"> 1. Poor 15 ml of oil into a 150 graduated cylinder 2. Poor 250 ml of water into a measuring cup 3. Poor the oil into the measuring cup 4. Cut each material into 2 by 2 squares 5. Dip one 2 by 2 square into the "oil spill" and leave it in the oil for 5 seconds. 6. Take the material out 7. See how many 2 by two squares it takes to remove the visable oil from the water. 8. Take the water and oil and poor it into a 250 gradualted cylinder. 9. Record 10. Poor the oil and water through a filtetr and record the filtered water level. 11. Repeat steps for cotton, spandex, nylon, wool, paper towel and the foam packaging. Keep the results seperate for the organics and the sythetics. <p>Results: The organics picked up more oil and water. The synthetics left more oil in the water but rejected more water. It didnt take as many 2 by 2 squares of the synthetics as it did the organics.</p> <p>Conclusions: Overall the organics picked the oil up the best. My hypothesis was partially correct because it didnt take as many synthetics as orgainics to pick up the oil.</p>	
<p>Summary Statement (In one sentence, state what your project is about.) My project tests which set of materials absorbs oil the best. I tested a group of organics and a group of sythetics.</p>	
<p>Help Received in Doing Project (e.g. Mother helped type report; Neighbor helped wire board; Used lab equipment at university X under the supervision of Dr. Y; Participant in NSF Young Scholars Program) See Display Regulation #8 on page 4. My mom helped me type the project. My dad helped me cut the material into two by two squares. My mom helped me come up with the project idea.</p>	