

**Science Fair**  
**2024-2025**  
**Gobind Sarvar School**  
**Calgary, Alberta, Canada**



**Grade 10**  
**Jaskirat Kaur**

Date	Summary of work done
12/04/2024	<ul style="list-style-type: none"> <li>- I started the search for a science fair topic</li> <li>- I used the internet and thought about topics I would be interested on</li> <li>- Chose a topic related around sleep</li> </ul>
12/31/2024	<ul style="list-style-type: none"> <li>- I got my topic approved by Ms. Amanda</li> <li>- Started a google doc to write all information</li> <li>- Wrote down the questions I need to answer for background information</li> </ul>
1/7/2025	<ul style="list-style-type: none"> <li>- I started to work on the questions</li> <li>- I had a discussion with Ms. Amanda about how I should do the experiment</li> <li>- Started to research on neurons and types of neurons</li> </ul>
1/8/2025	<ul style="list-style-type: none"> <li>- I had an in class discussion with Ms. Amanda about the errors I will face when conducting the experiment.</li> <li>- Finished research on neurons, and started researching about what a brain and its parts</li> <li>- Brainstormed title ideas</li> </ul>
1/9/2025	<ul style="list-style-type: none"> <li>- Finished research on the brain and its parts</li> <li>- Started research on brain waves and how they are measured</li> <li>- Ordered 2 fitness trackers for experiment, and talked to the participants that will be conducting the experiment.</li> </ul>
1/10/2025	<ul style="list-style-type: none"> <li>- Finalized my experiment plan with Ms. Amanda at school</li> <li>- Watches arrived</li> </ul>
1/11/2025	<ul style="list-style-type: none"> <li>- I started writing about the Circadian Rhythm, how it is controlled, the difference between a disrupted and a healthy clock, and circadian rhythm in teens.</li> </ul>
1/12/2025	<ul style="list-style-type: none"> <li>- Experiment starts tonight</li> <li>- Finalized each participant</li> <li>- Participant A has consistent hours of sleep</li> <li>- Participant B has inconsistent hours of sleep</li> </ul>
1/13/2025	<ul style="list-style-type: none"> <li>- Day 1 of experiment (<b>first week starts, without interventions</b>)</li> <li>- Participant A received 9 hours and 18 minutes of sleep</li> <li>- Participant B received 7 hours and 2 minutes of sleep</li> </ul>
1/14/2025	<ul style="list-style-type: none"> <li>- Day 2 of experiment</li> <li>- Participant A received 7 hours and 36 minutes of sleep</li> <li>- Participant B received 6 hours and 49 minutes of sleep</li> </ul>
1/15/2025	<ul style="list-style-type: none"> <li>- Day 3 of experiment</li> <li>- Participant A received 8 hours of sleep</li> <li>- Participant B received 7 hours and 6 minutes of sleep</li> </ul>

<b>1/16/2025</b>	<ul style="list-style-type: none"> <li>- Day 4 of experiment</li> <li>- Participant A received 8 hours and 8 minutes of sleep</li> <li>- Participant B received 8 hours and 49 minutes of sleep</li> </ul>
<b>1/17/2025</b>	<ul style="list-style-type: none"> <li>- Day 5 of experiment</li> <li>- Participant A received 8 hours and 6 minutes of sleep</li> <li>- Participant B received 4 hours and 50 minutes of sleep</li> </ul>
<b>1/18/2025</b>	<ul style="list-style-type: none"> <li>- Day 6 of experiment</li> <li>- Participant A received 8 hours and 37 minutes of sleep</li> <li>- Participant B received 6 hours and 9 minutes of sleep</li> </ul>
<b>1/19/2025</b>	<ul style="list-style-type: none"> <li>- Day 7 of experiment (<b>first week completed</b>)</li> <li>- Participant A received 10 hours and 50 minutes of sleep</li> <li>- Participant B received 5 hours and 14 minutes of sleep</li> </ul>
<b>1/20/2025</b>	<ul style="list-style-type: none"> <li>- Day 1 of experiment (<b>second week starts, with interventions</b>)</li> <li>- Participant A received 7 hours and 28 minutes of sleep</li> <li>- Participant B received 6 hours and 20 minutes of sleep</li> <li>- Both participants did light exercise before sleep</li> </ul>
<b>1/21/2025</b>	<ul style="list-style-type: none"> <li>- Day 2 of experiment</li> <li>- Participant A received 8 hours and 32 minutes of sleep</li> <li>- Participant B received 6 hours and 9 minutes of sleep</li> <li>- Both participants watched their phones before sleep</li> </ul>
<b>1/22/2025</b>	<ul style="list-style-type: none"> <li>- Day 3 of experiment</li> <li>- Participant A received 9 hours and 29 minutes of sleep</li> <li>- Participant B received 7 hours and 15 minutes of sleep</li> <li>- Both participants ate a light snack before sleep</li> </ul>
<b>1/23/2025</b>	<ul style="list-style-type: none"> <li>- Day 4 of experiment</li> <li>- Participant A received 9 hours and 10 minutes of sleep</li> <li>- Participant B received 7 hours 53 minutes of sleep</li> <li>- Both participants did meditation before sleep</li> </ul>
<b>1/24/2025</b>	<ul style="list-style-type: none"> <li>- Day 5 of experiment</li> <li>- Participant A received 13 hours and 48 minutes of sleep</li> <li>- Participant B received 7 hours and 53 minutes of sleep</li> <li>- Both participants ate a light snack before sleep</li> </ul>
<b>1/25/2025</b>	<ul style="list-style-type: none"> <li>- Day 6 of experiment</li> <li>- Participant A received 12 hours and 35 minutes of sleep</li> <li>- Participant B received 5 hours and 11 minutes of sleep</li> <li>- Both participants did meditation before sleep</li> </ul>
<b>1/26/2025</b>	<ul style="list-style-type: none"> <li>- Day 7 of experiment (<b>second week completed</b>)</li> <li>- Participant A received 8 hours and 7 minutes</li> <li>- Participant B received 6 hours and 41 minutes</li> <li>- Both participants watched their phone before sleep</li> <li>- I found a slide template using slidesgo</li> </ul>

<b>1/27/2025</b>	<ul style="list-style-type: none"> <li>- Continued information on circadian rhythm in teens and adults</li> </ul>
<b>1/28/2025</b>	<ul style="list-style-type: none"> <li>- Started information on the basics of sleep and sleep stages</li> </ul>
<b>1/29/2025</b>	<ul style="list-style-type: none"> <li>- Continued and finished information on sleep stages</li> </ul>
<b>1/30/2025</b>	<ul style="list-style-type: none"> <li>- Started to work on slides</li> <li>- Began writing out data from experiment</li> <li>- Continued research on sleep</li> </ul>
<b>1/31/2025</b>	<ul style="list-style-type: none"> <li>- I wrote out the hypothesis, materials and procedure</li> <li>- Updated slides with all information from the doc</li> <li>- Worked on sleep anatomy and disorders</li> </ul>
<b>2/2/2025</b>	<ul style="list-style-type: none"> <li>- Finished writing about sleep disorders and improving sleep</li> <li>- Finished conclusion and acknowledgments,</li> <li>- Finished all tables for data collected from the experiment.</li> </ul>
<b>2/3/2025</b>	<ul style="list-style-type: none"> <li>- Got slides approved by Ms. Amanda</li> <li>- Got slides printed out and began gluing on trifold</li> <li>- Worked on applications/limitations</li> </ul>
<b>2/4/2025</b>	<ul style="list-style-type: none"> <li>- Finished gluing for trifold</li> <li>- Set up tri fold</li> <li>- Practiced presenting</li> </ul>
<b>2/5/2025</b>	<ul style="list-style-type: none"> <li>- Science fair day</li> <li>- Presented my project to two judges</li> <li>- Received a lot of questions and feedback</li> </ul>
<b>2/7/2025</b>	<ul style="list-style-type: none"> <li>- Received results for science fair, I received first place</li> <li>- Met with Ms. Fauzia (science teacher) to discuss further steps to sign up with CYSF</li> <li>- Logged into portal</li> </ul>
<b>2/10/2025</b>	<ul style="list-style-type: none"> <li>- Filled out all forms for my CYSF portal</li> </ul>
<b>3/17/2025</b>	<ul style="list-style-type: none"> <li>- Began to transfer all information to my portal</li> <li>- Met with my science fair mentors, and asked for advice</li> </ul>
<b>3/19/2025</b>	<ul style="list-style-type: none"> <li>- Finished transfer of info</li> <li>- Received the bigger tri-fold</li> <li>- Had a meeting with all science fair participants</li> </ul>