

# **Future Science Leaders**

Presented by  
Acuitas Therapeutics

## **Information Session**

**2023-2024 Program Year**



We would like to  
acknowledge that  
we are gathered on  
the traditional  
unceded territory of  
the Coast Salish  
peoples.





# *Welcome*

Jenny McQueen, PhD,  
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FSL Program Manager

- BSc in Biochemistry, UBC
- Science Co-op & Exchange Program (University of Adelaide)
- PhD Genetics, UBC





“The *FSL* mission is to empower BC’s most inquisitive youth to pursue, achieve, and excel in their STEM aspirations.”



# How do we accomplish this?

**Meet and learn from professionals in a variety of careers**

**Create a lifelong network of like-minded peers**

**Develop the skills critical for a career in science: laboratory skills and science communication**

**Collaborate with others through scientific projects**

**Learn to think critically in a scientific context**



# *Agenda*

- Application Process
- Application Form
- Short answer questions
- Q&A



# Application process





# Actions and Deadlines

**Early Bird Applications (March 15) *Science World Day Out***


**Application Deadline (May 1)**

**Written applications reviewed (~May 5)**

**Interviews (~May 15-June 2)**

**Final Selection (~June 9)**

**Registration (June 30)**

An overhead view of two students sitting at a wooden desk. The student on the left is wearing a yellow shirt and is looking at a laptop. The student on the right is wearing a white shirt and is writing on a piece of paper. There are several papers, a laptop, and a blue folder on the desk. The text is overlaid on the image.

**The aim of the application process is to find a good fit between applicants' needs and the experience the FSL program offers.**





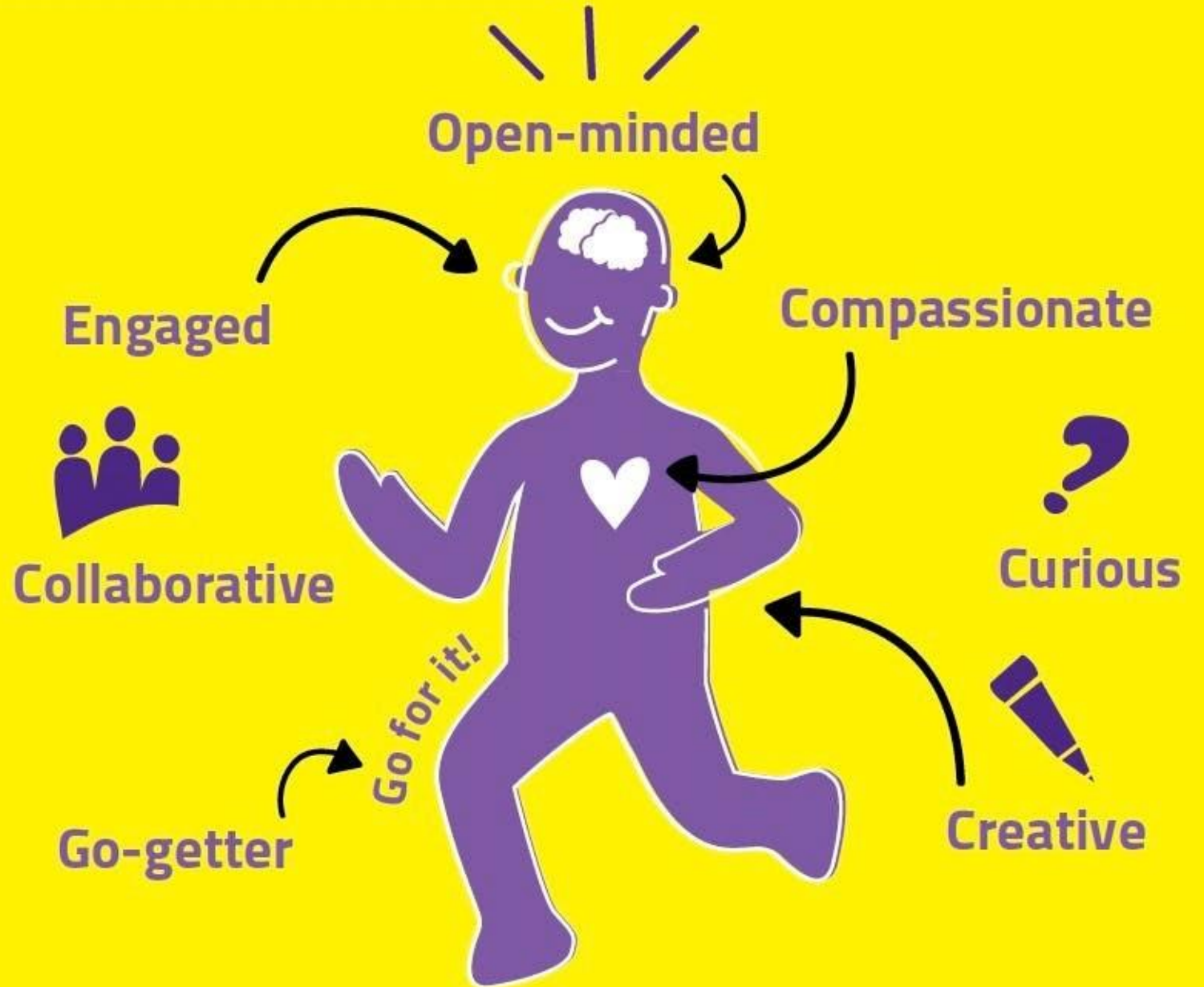
# What does success look like in FSL?

- Participating in sessions
- Completing work assigned
- Taking advantage of opportunities
- Use the FSL program to jump-start other activities

70%

# What qualities do successful students have?

## IDEAL *FSL* STUDENT

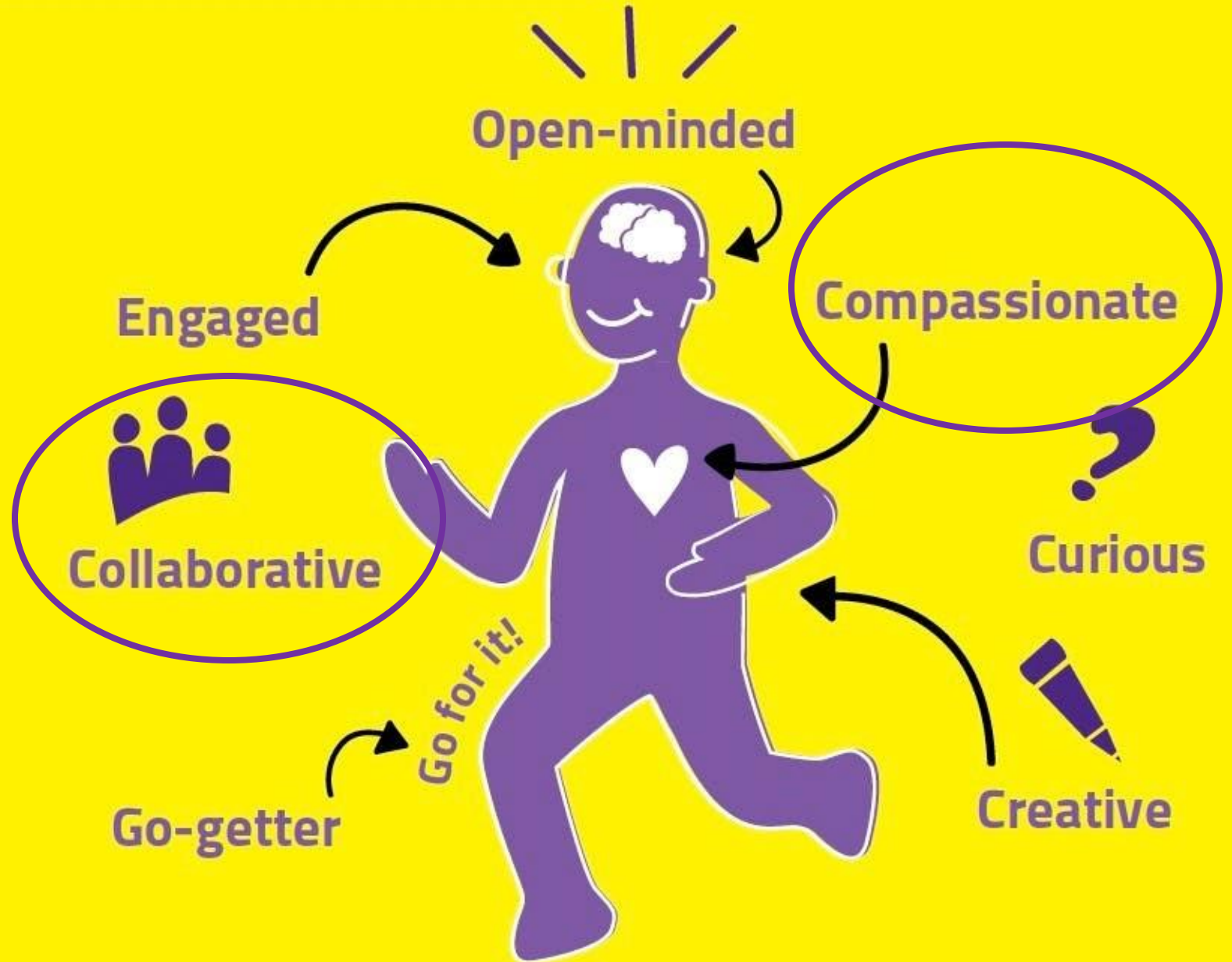




# Why these qualities?

## Team Player

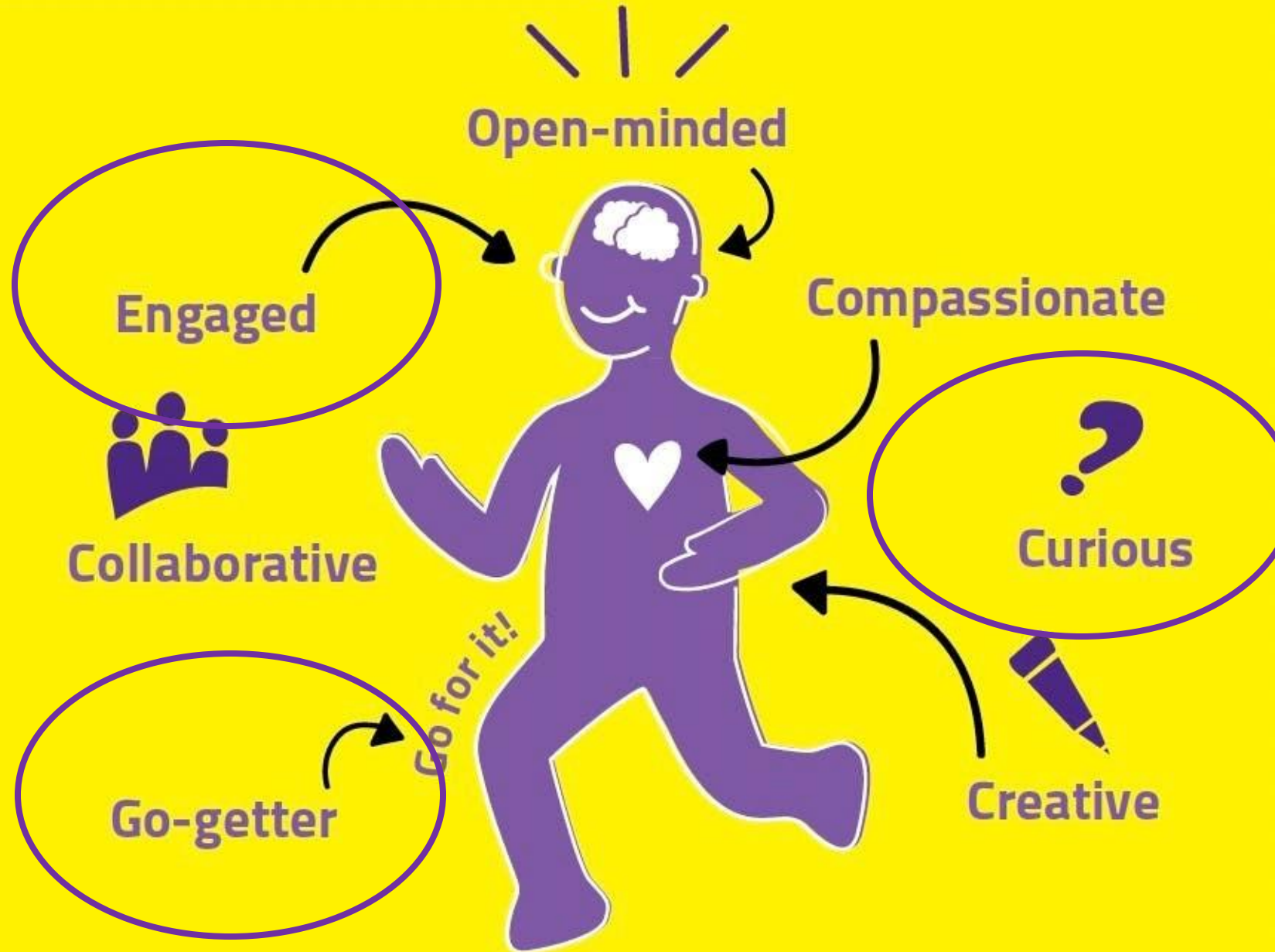
### IDEAL *FSL* STUDENT



# Why these qualities?

## Internally Motivated

### IDEAL *FSL* STUDENT

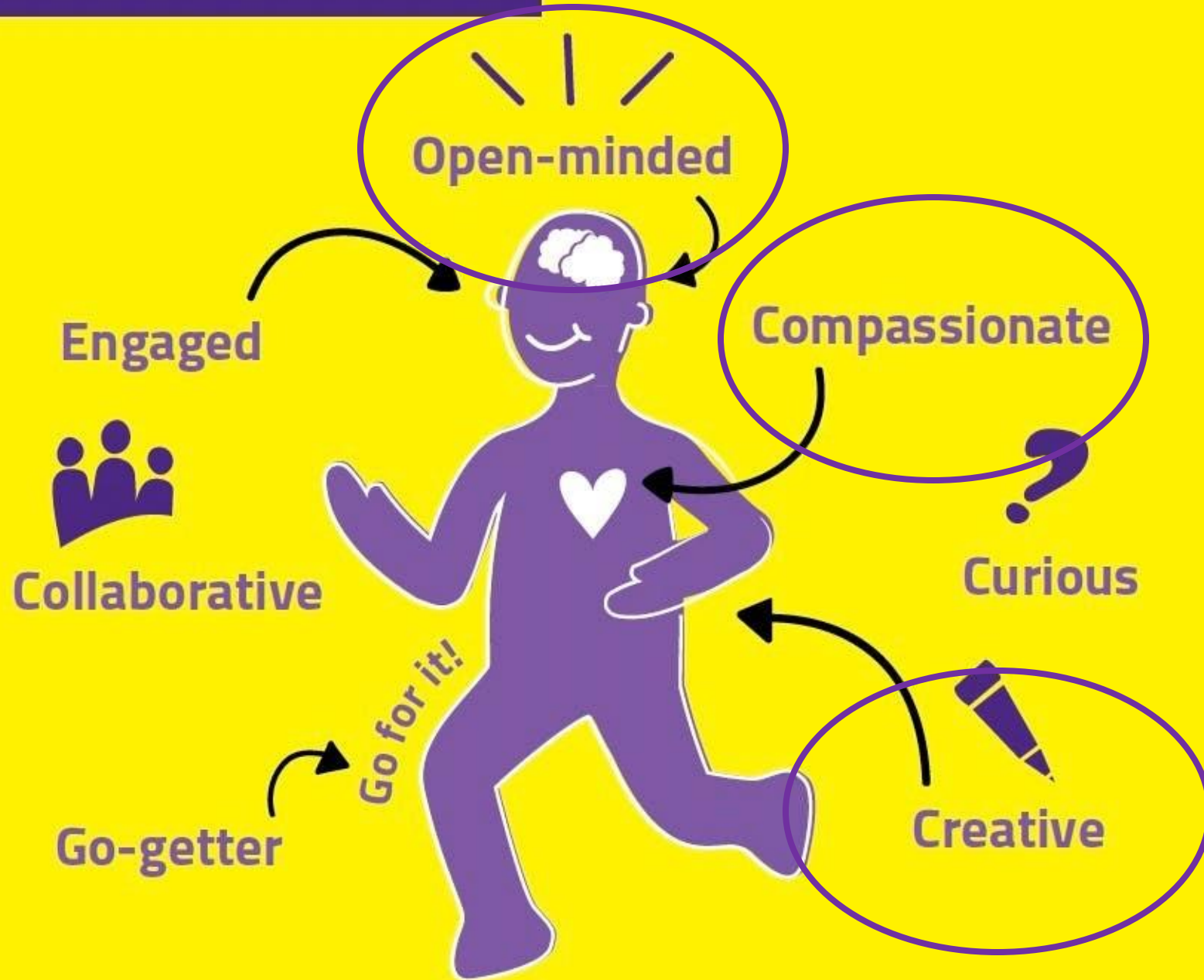


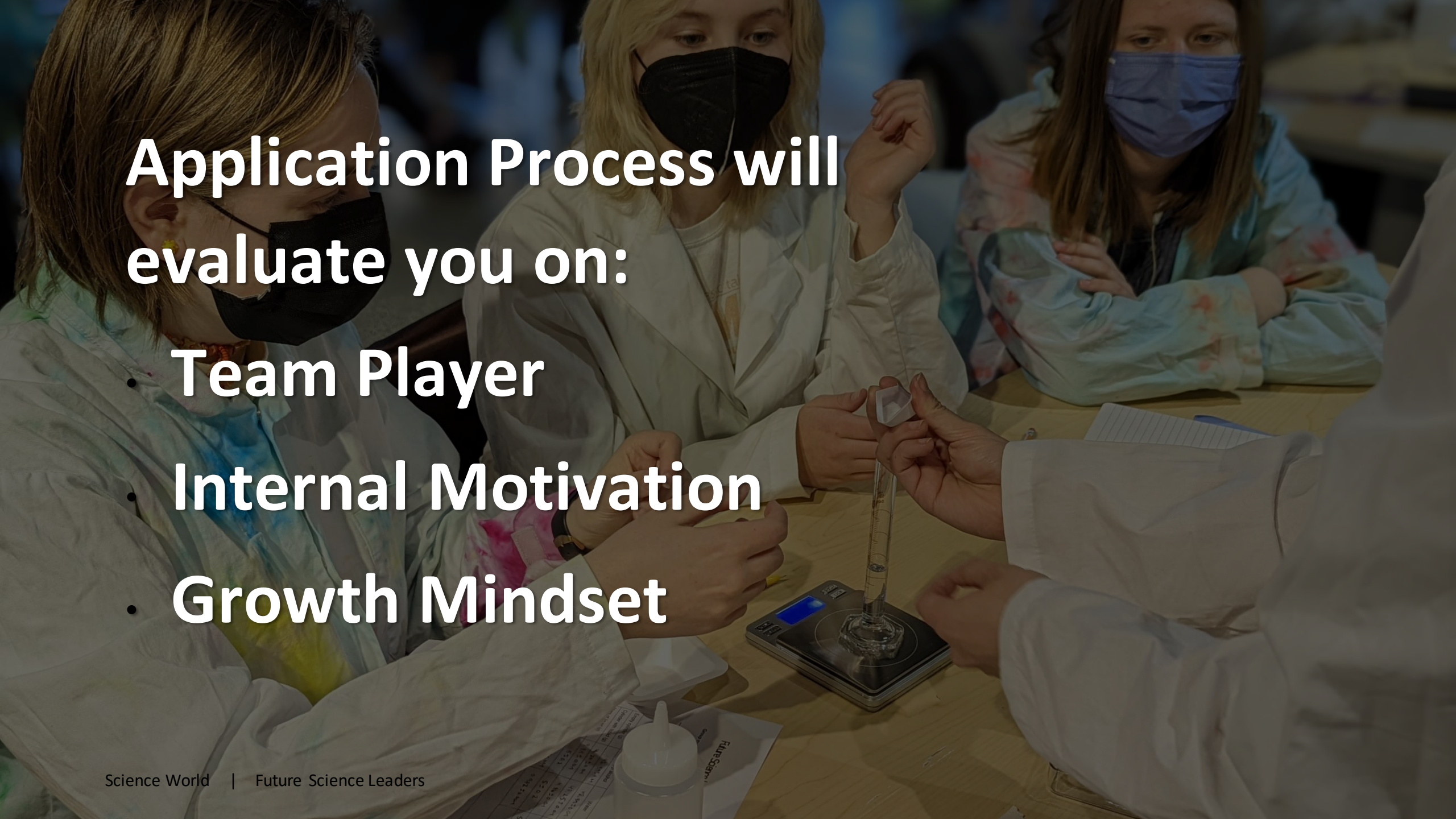


# Why these qualities?

## Growth Mindset

### IDEAL FSL STUDENT



A group of students wearing white lab coats and face masks are gathered around a table, engaged in a science experiment. One student is using a graduated cylinder to measure liquid, while others observe. The background is slightly blurred, showing more students and lab equipment.

# Application Process will evaluate you on:

- Team Player
- Internal Motivation
- Growth Mindset



# What it doesn't evaluate:



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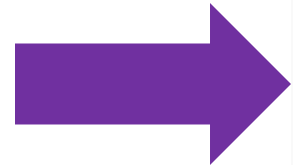
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# Application Form





<https://www.scienceworld.ca/futurescienceleaders/>



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TODAY WITH SCIENCE WORLDVISIT USGET CURIOUSBRIGHT TOMORROW

To prepare for your application use our [application checklist](#), join an information session, and attend an application workshop. You can register for any of the information sessions or workshops here:

**Info Session & Workshop Registration**

Want to spread the word about Future Science Leaders? See the additional resources tab for shareable posters, brochures, and information session slides.

Please complete your application here:

**Apply Now**

Not yet eligible for the 2023-2024 program year, sign up to be notified when applications open for the 2024-2025 program year.

**2024-2025 Notification**

# Application Form

- Your contact information (preferred first name and pronouns)
- A parent contact
- City
- Grade
- School

Evaluate our promotion strategy



# Application Form - References

Academic: someone who knows your academic interests and strengths. This is in a setting where you are being evaluated/graded.

*Eg. Teachers, school counsellor, tutor*

Personal: someone who knows your attitude/interests outside of school.

*Eg. Coach, music teacher, family friend*



# Short Answer Questions





## Writing Compelling Responses

- Make a personal connection
- Show your thinking/reasoning
- Reference specific details
- Write in your natural voice (don't sound fancy)
- Reader-centered (stay on topic, concise)
- Anticipate a rubric





How would you benefit from the FSL program?

*Why do we ask this?*

Do your needs match what we offer

Indicate how much you understand about FSL

Internal motivation – curious/go-getter

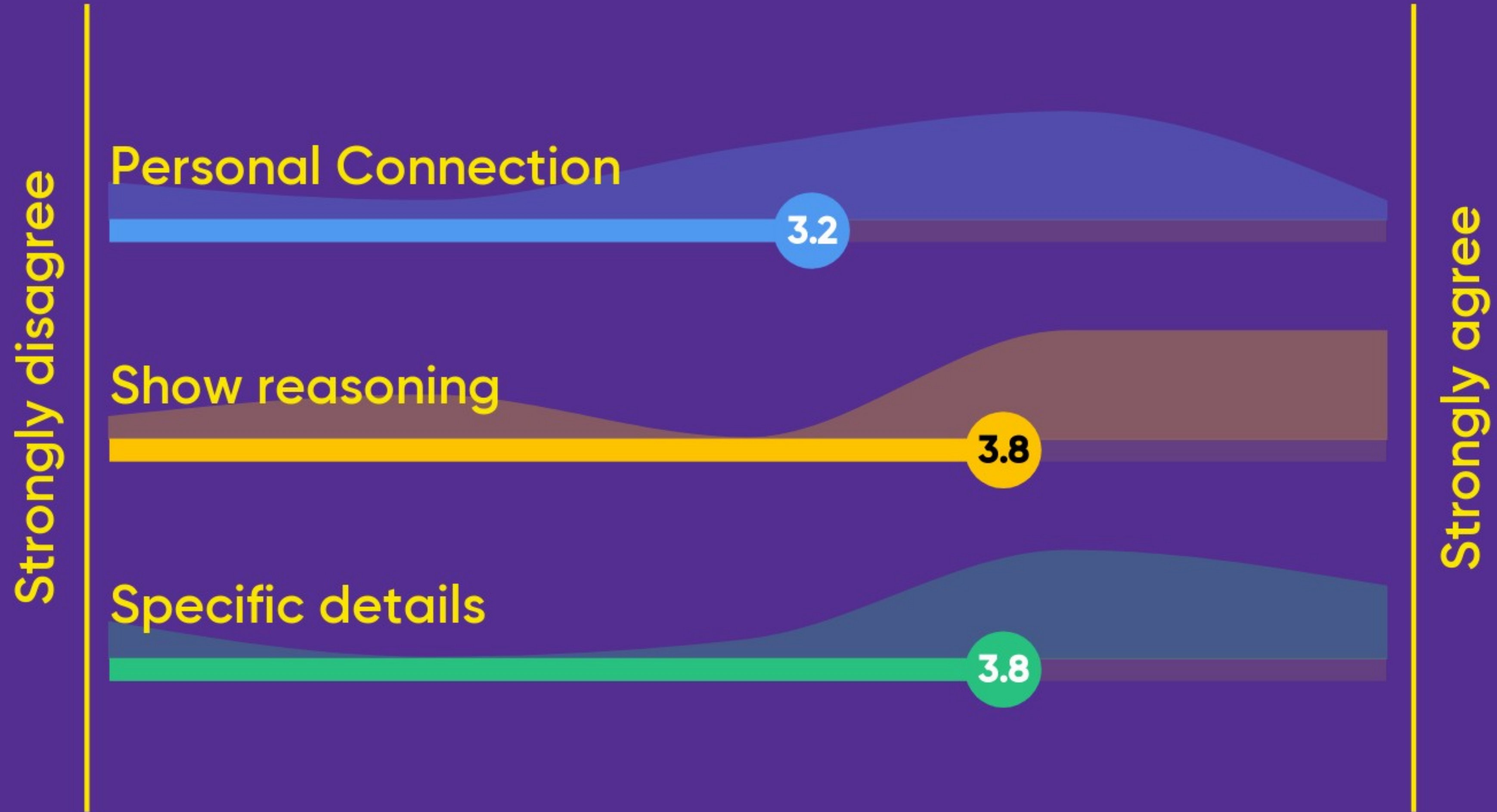


# "Science is my favourite class and I would like to learn more about it."



# Why?





Which writing has more personal connection, specific details, shows reasoning.

**A**

I would benefit by being able to grow my network of people interested in similar things. I would like to work with like-minded people as I think it would be more fun than when I do science in my class at school where people are less interested in science.

**B**

I would like to meet like-minded peers as in my school I am one of only a few people who find science exciting. I would like to be able to talk about the things we are learning. I think this would also help me build confidence in meeting new people. This would result in being able to network better in the future.



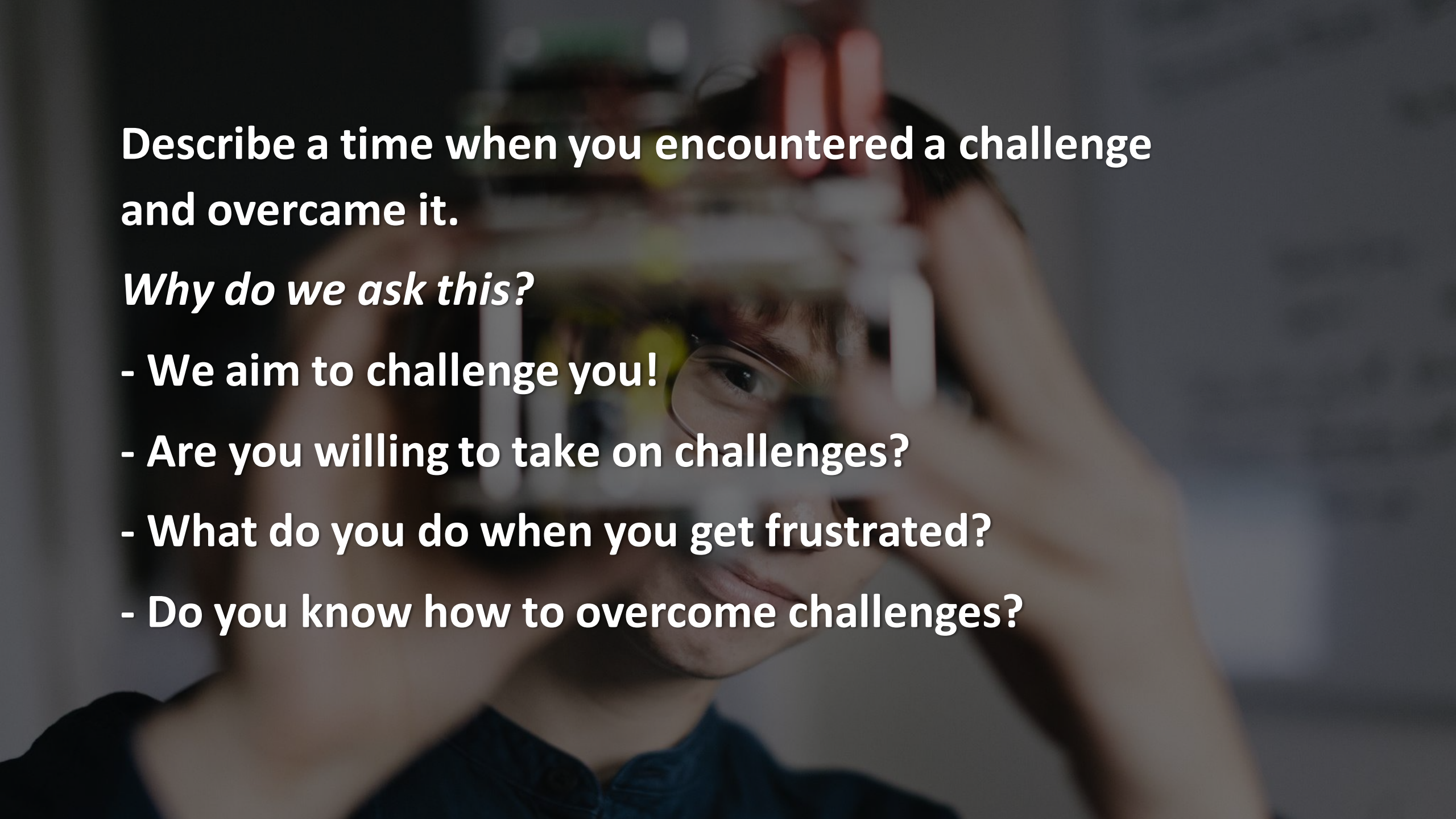
# Compare writing examples

A

31%

B

69%



**Describe a time when you encountered a challenge and overcame it.**

***Why do we ask this?***

- We aim to challenge you!**
- Are you willing to take on challenges?**
- What do you do when you get frustrated?**
- Do you know how to overcome challenges?**






I lacked some knowledge



I studied/worked hard



I gained that knowledge



I lacked some knowledge



I studied/worked hard



I gained that knowledge

I couldn't run 5km



I trained to run 5km



I ran 5 km



I lacked some knowledge



I studied/worked hard



I gained that knowledge

I couldn't run 5km



I trained to run 5km



I ran 5 km

I couldn't run 5km



I started with a basic training routine and joined a running group.



I ran 5 km and learned that the social aspect of running was really important for my success.



## Demonstrating growth mindset

- What was the issue?
- What are you going to do about it?
- How were you changed?

I couldn't run 5km



I started with a basic training routine and joined a running group.



I ran 5 km and learned that the social aspect of running was really important for my success.



# Identify problem

One time when I encountered a challenge and overcame it was during my high school science fair project. I had always been interested in sustainable energy sources, so I decided to create a model of a wind turbine that could generate electricity using household materials.

However, as I began to work on the project, I quickly realized that constructing a functional wind turbine was much more difficult than I had anticipated. I encountered multiple setbacks and had to troubleshoot various problems as I went along. Despite these challenges, I was determined to see my project through to the end. I spent countless hours researching and experimenting with different design solutions, and eventually, I was able to create a wind turbine that was able to generate a small amount of electricity.

While my project may not have been the most impressive one at the science fair, the process of overcoming the various challenges and completing the project taught me valuable problem-solving skills and the importance of perseverance. It also solidified my passion for sustainability and renewable energy, which I hope to continue exploring in the future as a member of the "Future Science Leaders" program.



# What did they do?

One time when I encountered a challenge and overcame it was during my high school science fair project. I had always been interested in sustainable energy sources, so I decided to create a model of a wind turbine that could generate electricity using household materials.

However, as I began to work on the project, I quickly realized that constructing a functional wind turbine was much more difficult than I had anticipated. I encountered multiple setbacks and had to troubleshoot various problems as I went along. Despite these challenges, I was determined to see my project through to the end. I spent countless hours researching and experimenting with different design solutions, and eventually, I was able to create a wind turbine that was able to generate a small amount of electricity.

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# How did it change them?

One time when I encountered a challenge and overcame it was during my high school science fair project. I had always been interested in sustainable energy sources, so I decided to create a model of a wind turbine that could generate electricity using household materials.

However, as I began to work on the project, I quickly realized that constructing a functional wind turbine was much more difficult than I had anticipated. I encountered multiple setbacks and had to troubleshoot various problems as I went along. Despite these challenges, I was determined to see my project through to the end. I spent countless hours researching and experimenting with different design solutions, and eventually, I was able to create a wind turbine that was able to generate a small amount of electricity.

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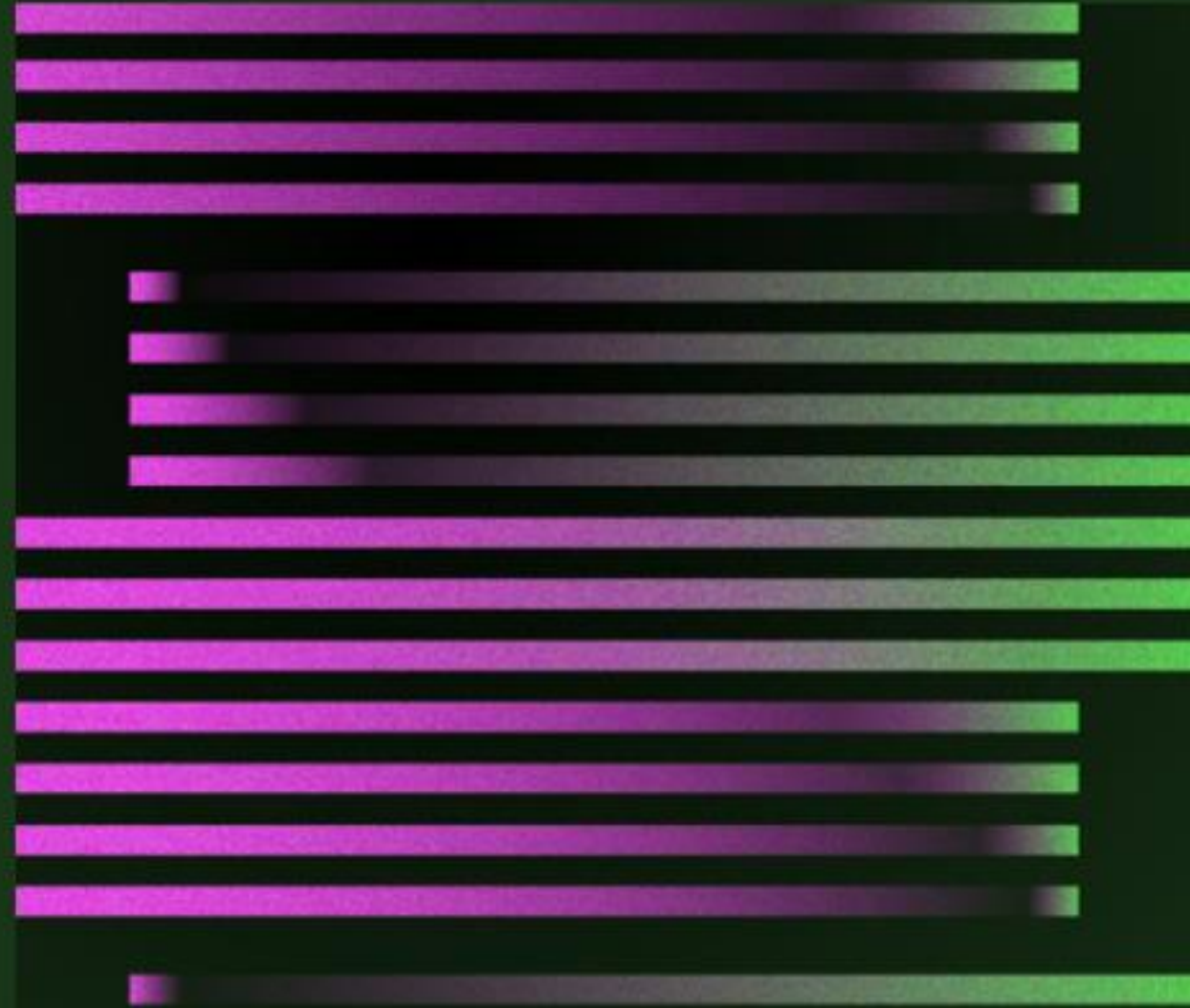
<https://openai.com/blog/chatgpt>

# Introducing ChatGPT

We've trained a model called ChatGPT which interacts in a conversational way. The dialogue format makes it possible for ChatGPT to answer followup questions, admit its mistakes, challenge incorrect premises, and reject inappropriate requests.

[Try ChatGPT ↗](#)

[Read about ChatGPT Plus](#)





# ChatGPT

- Treat it like an experienced and helpful friend/ family member
- Take suggestions
- Make it your own





**Describe a time when you got really excited about a STEAM-related topic or experience.**

**Why do we ask this?**

- **Internal motivation**
- **Your interests – get to know you better**
- ***Your interests don't have to overlap with the subjects we cover – since we are looking for open minded people that shouldn't matter.***



**I really like rocks.**



# Why?



## What actions would demonstrate "liking rocks"?

7

Answers

collecting them

Collecting rocks

collection, experiment

Exploring caves, rock systems, mountains. Knowing a lot about them.

studying how rocks are formed

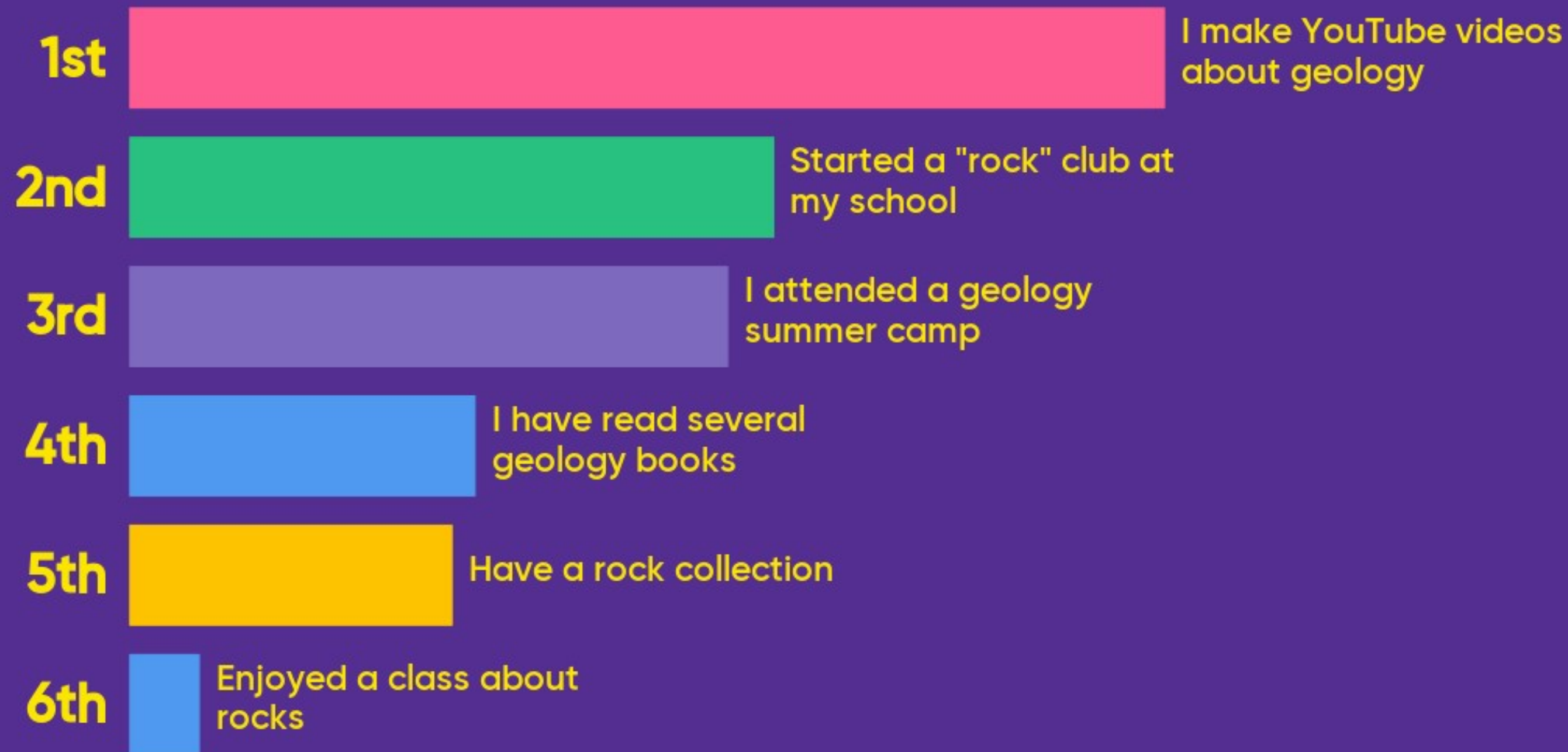
Rock collection

identifying different types

**I really like rocks! They have always fascinated me because...Recently my passion for rocks led me to....**



# Which activity would demonstrate the highest level of internal motivation?



# FSL would not be possible without the generous support of:



Foundation



Anonymous, in Honour of Connor Twa.

We also acknowledge the financial assistance of the Province of British Columbia.



# Contacts

Questions or concerns:

- Jenny McQueen, program manager
  - [jmcqueen@scienceworld.ca](mailto:jmcqueen@scienceworld.ca)

Websites:

- Read stories about alumni and find out more details:
  - [scienceworld.ca/futurescienceleaders/](https://scienceworld.ca/futurescienceleaders/)
- Examples of student work:
  - [futurescienceleaders.com](https://futurescienceleaders.com)



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