**Talk Tools – Mapping student interests to the curriculum (example)**

**Year 6 Science**

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| **Unit** | **Student interest connection ideas** |
| Physical conditions and survival of living things | **Samira** has a bearded dragon. What conditions are needed to keep a lizard alive? Is there any special equipment required?  **Tom** wants to be a research scientist on Macquarie Island like his uncle. How different are conditions on Macquarie Island? What does this mean for the types of plants and animals found there?  **Wei** likes to snorkel. How are physical conditions in aquatic environments different?  **Anh** has been watching *Alone* with their family. In what ways do physical conditions affect humans? What do they need to do to survive in different environments?  **Emma** helps her family run a bush care group. How do they ensure the survival of seedlings? How do they choose which seedlings to plant in particular environments? |
| Earth and sun models | **Kianga** moved here from the UK last year. What are her experiences of day length in the UK at different times of year?  **Neil** likes creating models. Could Neil help the class build a simple orrery? **Geesje** loves video games. Are there any examples where there are multiple suns, or where daylength is simulated by movement of the sun across the sky? How would we model that in a video game? |
| Electric circuits | **Didi** wants to be an electrical engineer like her mum. Could we have her mum visit the class to talk about her career and what she’s currently working on?  **Tracey** is really into building Lego Mindstorm robots. Could she show the class how these robots use switches and other components?  **Jim** is fascinated with steampunk. Could we explore how different our world would look if we relied on steam rather than electricity or how electricity changed the world? |
| Reversible and irreversible changes | **Mikhail** loves to bake in his spare time. His experiences of working with ingredients will be helpful in explaining change.  **Lucy** wants to be a solo adventurer. Could we explore how to create a solar still to gather fresh water?  **Jay** leads the school recycling efforts. Could we explore how the school uses reversible changes to minimise our environmental impact? |

**Year 8 Science**

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| **Unit** | **Student interest connection ideas** |
| Relationship between structure and function of cells, tissues and organs in plants and animals | **Sienna** has a cat with kidney failure. Her description of her pet’s treatment could help the class understand the role and function of this organ.  **Kim** is fascinated with augmented reality (AR). They could investigate AR tours of animal and plant systems and recommend the best ones for the class to experience.  **Archer’s** dad is a haematologist. Could he visit the class to talk about what they look for when checking blood?  **Susie** likes building models. She could explain to the class how her models are similar and different to the real thing and we could use that as a basis for discussing system models and even artificial organs. |
| Plate tectonics and the rock cycle | **Tina** visited Wave Rock last holidays. She could share her photos and explain what she learned about its formation.  **Ryn** is fascinated with books in the *Jane Doe Chronicles*. Could she lead a thought experiment about a world with rooms full of lava?  **Joon** grew up in New Zealand. What experiences can he share about living in a country prone to earthquakes?  **Abebi’s** mum works in the mining industry. Could we connect with her virtually to learn more about her role? |
| Energy transfer and transformations | **Lorie** competes in mountain biking. She could explain the techniques she uses and we could link that to energy transfers and transformations.  **James** has been learning how to use traditional fire sticks. He could demonstrate their use for the class and we could explore the energy transfers and transformations.  **Winnie** is a big fan of old musicals. I wonder if she has seen (or could watch) *Chitty Chitty Bang Bang* and could share the Rube Goldberg machine scene with us?  **Rory’s** dad is an electrician. Perhaps he could join us to explain how solar systems and heat pumps work? |
| Physical and chemical change | **David** is an expert cake decorator. We could explore the techniques he uses and identify physical or chemical changes.  **Gina** is an expert with making movies. Could she film our class experiments as an evidence base for identifying physical or chemical change?  **Wren** has a pool at home. She could share the testing process they engage in.  **Max** is passionate about the environment. They could explain how long different materials take to break down in the environment and we could link that to its physical and chemical properties. |