



## Girls in STEM at home

### What is STEM?

STEM stands for science, technology, engineering and mathematics.

### Benefits of studying STEM

- A STEM degree can be a starting point for virtually any career.
- Over 80% of science, technologies and maths graduates gain full-time employment, and over 88% of engineering graduates gain full-time employment, compared with the national average of 72.9% for all graduates.<sup>1</sup>
- STEM is the key to solving important world issues such as curing diseases, saving the environment and building critical infrastructure.

A recent survey of Australian employers found that more than 82 per cent valued STEM qualifications in the workplace.<sup>2</sup>

### Engaging girls in STEM

An Australian Government report has found that fewer girls undertake Year 12 STEM subjects than boys.<sup>3</sup> So how can we support girls to engage with STEM at school, and to consider STEM careers?

#### It all starts at home

Families have a big influence on girls' school subject and career choices. You can help by building your girls' confidence and interest in STEM at home.

#### Inspire a love of STEM

Inspire a love of STEM by discussing STEM topics and enjoying STEM entertainment as a family. Try to connect STEM with your child's interests and passions.

- Do the Career Quiz on The GiST website together to connect your child's interests and passions with STEM careers.
- Watch movies together that positively portray women engineers, scientists or mathematicians.
- Borrow science fiction or non-fiction science books from the library.
- Talk about how STEM is a part of everyday life – from our phones, to the satellites that connect us to the internet, to the infrastructure on our streets.
- Discuss how STEM can be used to solve important world problems and social issues.

#### Build confidence

Girls sometimes feel less confident than boys when it comes to STEM subjects at school. But you can help.

- When the family talks about people in STEM, try to notice and counter gender stereotypes and biases.
- Encourage girls to have a 'growth mindset'. A growth mindset is about believing that success is due to effort and persistence, rather than natural ability.
- Encourage girls to get hands-on with STEM. The 'At home activities' page on The GiST website suggests activities that you can do together at home – including making a cloud in a bottle, making paper airplanes, constructing towers with raw pasta, and more.

#### References

1. *2018 Graduate Outcomes Survey – Longitudinal (GOS-L)*. (2018). Quality Indicators for Teaching and Learning.
2. *Australia's STEM workforce: A Survey of Employers*. (2014). Deloitte Access Economics.
3. *Advancing Women in STEM*. (2019). Commonwealth of Australia.

For more ideas, go to:

[thegist.edu.au](http://thegist.edu.au)