



Post-Visit
Education Resources
for Teachers

MUSEUMS VICTORIA

### Suggested Curriculum Links

	LEVEL 5 + 6	LEVEL 7 + 8	LEVEL 9 +10
TECHNOLOGIES > DESIGN + TECHNOLOGY			
Technologies + Society	how people in design and technologies occupations consider competing ethical factors including sustainability in the design of products, services and environments VC2TDE6S01	how people in design and technologies occupations consider ethical factors to design and produce products, services and environments VC2TDE8S01	how people in design and technologies occupations consider ethical factors to innovate and improve products, services and environments VC2TDE10S01
Creating Designed Solutions > Investigating + Defining	investigate needs or opportunities for designing, and the materials, components, tools and processes needed to create designed solutions VC2TDE6D01	explain needs or opportunities for designing, and investigate and select tools, materials, processes and components to create designed solutions VC2TDE8D01	analyse needs or opportunities for designing; develop design briefs; and investigate, analyse and select materials, systems, components and tools to create designed solutions VC2TDE10D01
THE ARTS > VISUAL COMMUNICATION			
Developing Practices		reflect on, analyse and document the ways that they and other designers investigate, generate, develop and resolve their ideas, concepts and solutions to inform decisions they make throughout the visual communication design process VC2AVC8D02	reflect on, analyse, evaluate and document their own and others' design ideas, concepts and solutions to inform decisions they make throughout the visual communication design process VC2AVC10D02

ENGLISH	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8
Literature > Creating literature	create texts, experimenting with vocabulary, figurative language, storylines, characters and settings from literary texts they have encountered VC2E5LE05	create texts that adapt plot structure, characters, settings and/or ideas from literary texts they have encountered, and experiment with vocabulary and literary devices VC2E6LE05	create texts that experiment with literary language features and devices encountered in texts VC2E7LE06	create texts that experiment with literary language features and literary devices for particular purposes and effects VC2E8LE06

## SUSTAINABILITY, THE ENVIRONMENT + LEGO®

We can't say we inspire and develop the builders of tomorrow if we're ruining the planet.

Tim Guy Brooks,
Former Head of Environmental Responsibility
at The LEGO Group

There are more than a **trillion** LEGO pieces in existence and around **36 billion** more produced each year! That is **a lot** of plastic. So, what is LEGO Group doing to tackle this environmental challenge?

Students can use LEGO Group as a **case study** to explore how **ethical factors**, including **sustainability**, have been considered to **innovate** and **improve** products.

### **Watch**

### Take a peek inside the LEGO Sustainable Material HQ

LEGO on YouTube: https://youtu.be/J9zWHc9kEU8?si=RRrRNuIAm pyOz2O

### Our biggest build ever!

The LEGO Group on YouTube: https://youtu.be/w59XlihV-wg?si=k4KtsCkjSc85SuhW

### Read (older students / advanced readers)

**LEGO Group: Growing Profits & Reducing Environmental Impact** by Jasmin Jessen, Sustainability Magazine, March 12 2025

https://sustainabilitymag.com/articles/lego-group-growing-profits-reducing-environmental-impact

### How LEGO is Building Towards a More Sustainable Future by James Darley,

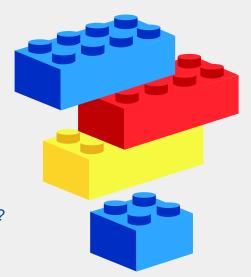
Sustainability Magazine, September 7 2024

https://sustainabilitymag.com/articles/lego-h1-2024-results-growth

### **Discuss**

- What is the challenge LEGO has identified?
- What specific changes have they made?
- What else are they trying?
- Why is this important?
- For older students:

Consider what this means not only in terms of the product design and materials, but also through the supply chain. How does 'life cycle thinking' influence LEGO Group's decisions?



### **Activity**

Plastic is used to make so many toys we know and love. LEGO is an excellent example of a toy that is now being made in a more sustainable, environmentally friendly way. What other toys could follow The LEGO Group's lead?

- Create a new design for an existing toy that could be made with sustainable materials. Describe, annotate, note the changes you would to this toy.
- Teachers may like to take students through the design thinking process to complete this task.

In their **Sustainable Material HQ** video, LEGO explains that "Some materials will work, some won't" as they explore a range of sustainable solutions.

One such material was plastic water bottles.

In 2021, LEGO announced they were using plastic bottles to make bricks.

### **Watch**

How we're working on making LEGO® bricks more sustainable!

The LEGO Group on YouTube: https://youtu.be/yOXTTopE Yc?si=VTivgmAQwtgtwqBy

So you're a plastic bottle who wants to become a LEGO brick...

The LEGO Group on YouTube: https://youtu.be/4gNIB ql1nl?si=nYDD0p-Rv8qWTGUh

### **Discuss**

- Do you think this is a good solution?
- Can you think of any other products made from recycled plastic bottles?

### Read (older students / advanced readers)

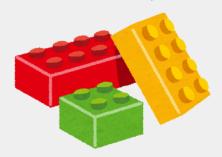
**Lego abandons effort to make bricks from recycled plastic bottles** by Jem Bartholomew,

The Guardian, 25 September 2023

https://www.theguardian.com/lifeandstyle/2023/sep/24/lego-abandons-effort-to-make-bricks-from-recycled-plastic-bottles

Lego's ESG dilemma: Why an abandoned plan to use recycled plastic bottles is a wake-up call for supply chain sustainability The Conversation, 5 October 2023

https://theconversation.com/legos-esg-dilemma-why-an-abandoned-plan-to-use-recycled-plastic-bottles-is-a-wake-up-call-for-supply-chain-sustainability-214573



### **Discuss**

- Why did LEGO abandon the 'Bottles for Bricks' plan?
- Do you agree or disagree with this decision? Why?
- What were the limitations or potential issues / challenges in using recycled plastic bottles?

### **Activity**

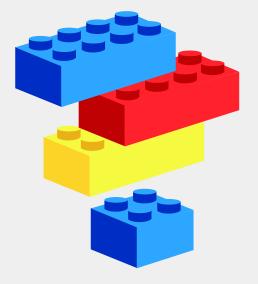
What is life cycle thinking? What is its importance in the context of sustainability and how does this theory apply to LEGO?

- Discuss how life cycle thinking has influenced The LEGO Group's decision to no longer make their bricks with recycled water bottles.
- In small groups, ask students create a map of the life cycle of a LEGO brick (they may need to
  do some online research to assist). Provide big sheets of paper and encourage the use of
  colour pencils / markers to map out all the elements:
- 1. Material Extraction all the things that have to happen to get the raw materials needed to make the product
- 2. Manufacture how are these materials processed and transported, what stages do they go through to become a LEGO brick? Identify the inputs (e.g. energy, raw materials, water) and outputs (e.g. emissions, waste materials, products).
- 3. Package and Transport how is the product packaged and transported?
- 4. Use consider retail and sales, and the relationship between design and human interaction.
- 5. End of Life most likely way the product will be discarded.

### <u>Activity</u>

LEGO made some really interesting content around their "Bottles for Bricks" campaign.

- Research some of the other sustainable materials LEGO is using to make their products.
- In small groups or solo, come up with a fun slogan / title (like "Bottles for Bricks") that brings this idea to life.
- Create a poster that lets LEGO fans know about this innovative change to the product.
- Older students may like to create their own video (using LEGO stop-motion or other techniques) or social media campaign to highlight an innovative change being implemented by the company. They may like to visit The LEGO Group YouTube channel for inspiration!



LEGO is reducing single-use plastic and introducing paper-based bags in all their LEGO sets. If students have LEGO sets, they may have noticed this change themselves. But what they may *not* know is that this change to paper bags happened after The LEGO Group received letters from children asking them to remove single-use plastics from their products!

Discuss these comments from Niels B. Christiansen, CEO of The LEGO Group, with the class:

As a company who looks to children as our role models, we are inspired by the millions of kids who have called for more urgent action on climate change. We have received many letters from children about the environment asking us to remove single-use plastic packaging.

9 9

### Read

Students can read more about it on the LEGO website: https://www.lego.com/en-us/sustainability/sustainable-packaging

### Watch

### The Journey to Paper-based Bags

The LEGO Group on YouTube: https://youtu.be/6Lr3ZQvfrWw?si=OHmlkMxPSOu7SV32

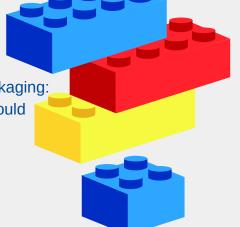
### **Discuss**

- What is single-use plastic? Why is it a problem for the environment?
- Why were the letters from children so important to LEGO? Why do you think they listened?
- What needed to be considered when designing paper bags for LEGO?
- What creative solutions or designs do you imagine were used?

### **Activity**

Make a list of other products that use single-use plastic in their packaging:

- Write a letter to the company outlining why you believe they should make the change to a sustainable material.
- Design new packaging for this product that uses a sustainable material.



# CREATIVE + DESIGN THINKING WITH LEGO®

... there is absolutely no right or wrong with Lego bricks. I always tell kids that when I build Lego, I build it to the instructions first and then it's a matter of how long will it last until I pull it apart and build something else.

> Ryan "Brickman" McNaught, LEGO® Certified Professional

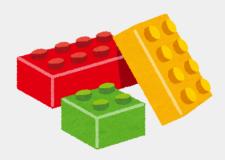
As we have seen in the *LEGO*<sup>®</sup> *Star Wars: The Exhibition*, LEGO is an incredible tool for creating / making awe-inspiring model build. It is also an incredible tool that we can use to help us creatively think through design problems or challenges.

Inspired by the exhibition, ask students to **plan and design a museum space** and use LEGO to prototype their ideas.

### **ACTIVITY**

*LEGO*<sup>®</sup> *Star Wars: The Exhibition* includes incredible rooms, displays and interactive elements based on characters, themes, moments and locations from the *Star Wars* franchise. However, the *Star Wars* galaxy is HUGE and not everything could be included in this exhibition.

- In small groups, ask students to think about something they would have liked to have seen (or would have liked to have seen more of) in *LEGO® Star Wars: The Exhibition*.
- In groups, design a new space that could be included in the exhibition that would showcase this idea. Consider:
  - What kind of space do you want to build? (Prompts or considerations: Interactive, visual, physical elements, passive or active etc.)
  - Who is it for? (Prompts or considerations: What age group or demographic is this for? Star Wars enthusiasts of all ages? Babies and toddlers? A quiet space for people with sensory needs?)
  - What do you want to help the visitor do in this space? (Prompts or considerations: Learn more about an aspect of *Star Wars*? Get involved in making something? Feel relaxed or entertained?)
- Use LEGO bricks to build a model of this space (i.e. a prototype of the design) and consider the layout (how will visitors move through the space), and awesome elements that may surprise or delight visitors.



## + IMAGINATION WITH 'STAR WARS'

One thing about 'Star Wars' that I'm really proud of is that it expands the imagination.

George Lucas Creator of *Star Wars* 

Back in 1977, the first of the *Star Wars* films was released – written and directed by George Lucas. It was unlike anything anyone had ever seen before ... And it went on to become, arguably, one of the most influential films of all time. The world (or galaxy) of *Star Wars* has grown from the original trilogy of the 1970s/1980s to span more films (prequels and sequels to the original) and TV series. It has inspired games, toys, theme park rides and even an exhibition made out of LEGO!

George Lucas says he is proud of how *Star Wars* 'expands the imagination' ... so, let's use the *Star Wars* galaxy to help expand students' imaginations and creative writing!

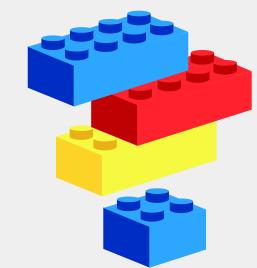
### **ACTIVITY**

*Star Wars* is a story of **heroes and villains.** Take a moment to look at what those terms mean and how they apply to the beloved characters of *Star Wars*.

- As a class, brainstorm a list of heroic traits, and a list of villainous traits.
- What characters can students remember from *LEGO® Star Wars: The Exhibition* that have some of these traits? Are any of these characters "all hero"? "All villain"? Are any a combination of the two?
- Choose a favourite hero and / or a favourite villain and ask students to draw and describe what this character looks like. Consider:
  - The colours they dress in
  - Their weapons, armour, headwear
  - Anything else about the visual 'look' of the character that hints to their heroic or villainous personality
- Alternatively (or following on from their annotated drawing), students may like to design and build their character with LEGO bricks. To further extend this activity, ask students to write instructions so others could build the character they designed

(i.e. create their own LEGO *Star Wars* model!).

- Ask students to write a character profile:
  - Name
  - · List of heroic / villainous traits
  - Accomplishments
  - Features (e.g. uniform / weapon / are they human or Droid or Wookiee?)



It is well-documented that, in writing *Star Wars*, George Lucas was influenced by Joseph Campbell's theory of the 'Monomyth' and 'Hero's Journey'. **The Hero's Journey** can be a powerful tool to help students structure and develop their own stories.

### **WATCH**

This fabulous TED-Ed video about the Hero's Journey -

What makes a hero? by Matthew Winkler available on YouTube: <a href="https://www.youtube.com/watch?v=Hhk4N9A0oCA">https://www.youtube.com/watch?v=Hhk4N9A0oCA</a>

### **ACTIVITY**

Choose one of the *Star Wars* stories students are most familiar with and use it to unpack the 12-stages of the Hero's Journey. Alternatively, teachers may like to source some quality *Star Wars* stories to read / listen to / watch with the class and use this to help understand the concept of the Hero's Journey.

- Create a visual representation of the Hero's Journey
  - The clock imagery from the video (above) can be an interesting way for students to present the story. Each step of the journey is the 'hour' on the clock.
  - OR, what would *Star Wars* look like if Darth Vader were the hero? If students are familiar with *Star Wars: Episode IV A New Hope*, ask them to plot the Hero's Journey from the perspective of Darth Vader ... (or anther villain from the series)
- Use the Hero's Journey as a template to plot a new *Star Wars* adventure using existing or entirely new characters!
- Using the template as a guide, student can now draft and write a short story or graphic novel.
- Older / more advanced students may like to explore Joseph Campbell's theory more deeply.

*LEGO*<sup>®</sup> *Star Wars: The Exhibition* uses some of the iconic locations and settings from the *Star Wars* films to bring the objects to life. Think back to one of the places you got to visit through the exhibition. These included:

- Tatooine
- Endor
- Rebel Command Ship

### **ACTIVITY**

- Brainstorm a list of adjectives that could be associated with this place.
- Consider all the senses and find words that help describe the sensory experience of being there (smells, sounds etc.)
- Ask students to imagine they are having a holiday in this extraordinary landscape! What would they see, hear, do in this place?
- Design a postcard based on this place and write a short letter to someone telling them all about your amazing holiday.





The LEGO Group

If students are feeling especially inspired after visiting *LEGO*® *Star Wars: The Exhibition*, then perhaps they would like to find out more about the people behind the scenes and their career pathways. There are so many incredible jobs out there that students may not know about ...

Ryan 'Brickman' McNaughton has a great website where students can read more about Ryan and The Brickman Team: <a href="https://www.thebrickman.com/">https://www.thebrickman.com/</a>

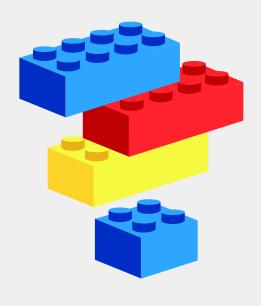
- Undertake research and discover how Ryan McNaughton became 'Brickman'.
- Discuss: Is there is anything you are passionate about that could lead to a career?

Students can find out more about all the different types of jobs people do for a big company like LEGO: <a href="https://www.lego.com/en-au/careers">https://www.lego.com/en-au/careers</a>

A 'dream job' for LEGO enthusiasts is that of a model designer. LEGO has a short write up about what it takes to become a model designer at LEGO here:

https://www.lego.com/en-au/service/help-topics/article/becoming-a-model-designer-at-the-lego-group

- One of their pieces of advice for aspiring model designers is to play with LEGO bricks as much possible! Why do you think this is important? What other subjects and experiences are important for this role?
- The article mentions that The LEGO Group will often ask potential designers to 'build a small head out of LEGO bricks in just four hours'! Why do you think they do this?
- Practice making a realistic model using only regular standard LEGO bricks.



### **Further Resources**

### **ABOUT LEGO® STAR WARS: THE EXHIBITION**

https://www.legostarwarstheexhibition.com/about-exhibition/

### The LEGO Group®

LEGO YouTube Channel: <a href="http://www.youtube.com/@LEGOEducation">http://www.youtube.com/@LEGOEducation</a>

LEGO Education: <a href="https://education.lego.com/en-au/">https://education.lego.com/en-au/</a>

LEGO Creative Activities: <a href="https://www.lego.com/en-au/families/creativity">https://www.lego.com/en-au/families/creativity</a>

### STAR WARS

Star Wars Kids – activities and videos: <a href="https://www.starwarskids.com/">https://www.starwarskids.com/</a>

Star Wars activities: <a href="https://www.starwars.com/activities">https://www.starwars.com/activities</a>

### THE BRICKMAN

Brickman: <a href="https://www.thebrickman.com/">https://www.thebrickman.com/</a>

### **BOOKS**

*Brickman's Big Book of Better Builds* by Ryan 'Brickman' McNaught (Published by Murdoch Books, 2022)

*Brickman's Family Challenge* by Ryan 'Brickman' McNaught (Published by Murdoch Books, 2020)

LEGO Star Wars Ideas Book (Published by DK Books, 2018)

### MELBOURNE MUSEUM EDUCATION

https://museumsvictoria.com.au/melbournemuseum/learning/school-programs-and-resources/

