Lesson 6: Reflection and Future Thinking

3D Printing Center - Village School

v1
2025

Congratulations Designers!

Look What You've Accomplished!

Display all printed objects from the 6-lesson journey

- **Keychains** from Lesson 2
- **Containers** from Lesson 3
- **Problem-solvers** from Lesson 4
- **Improved designs** from Lesson 5

What We've Learned

- **What** 3D printing is and how it works
- **How** to design in Tinkercad
- **How** to solve problems with design
- **How** to improve and iterate
- **How** to think like designers

Show and Tell Time!

Present Your Best Work

Simple format:

- This is my ____
- It solves the problem of ____
- I'm proud of ____

Everyone gets to share!

Sharing Your Success

- **Hold up** your printed object
- **Speak clearly** so everyone can hear
- **Be proud** of your work
- **Listen respectfully** to others
- **Give compliments** to classmates

Every Design is Amazing

Remember:

- **Every** design solved a problem
- **Every** student learned new skills
- **Every** object represents creativity
- **Every** person should be proud

Looking Back on Our Journey

Discussion Questions:

- What was the **hardest part** about 3D design?
- What **surprised** you about 3D printing?
- What would you **change** about your designs?
- What was your **favorite** part of the process?

Quick Write

Capture Your Thoughts

Write 2-3 sentences about:

- Your **favorite** project from the 6 lessons
- **Why** it was your favorite
- What you **learned** from making it

Take 5 minutes to write

Skills You've Developed

You Are Now Designers!

- **3D thinking** - visualizing objects in space
- **Problem solving** - identifying and addressing needs
- **Digital literacy** - using design software
- **Iteration** - improving through testing
- **Presentation** - sharing your work with others

Real-World Applications

Where 3D Printing is Used

- **Medicine** - prosthetics, surgical tools, organs
- **Aerospace** - rocket parts, satellite components
- **Automotive** - car parts, prototypes
- **Architecture** - building models, construction
- **Fashion** - jewelry, shoes, accessories
- **Food** - chocolate, pizza, decorative items

What's Coming Next?

Amazing developments:

- **Faster** printers
- **New materials** (metal, glass, living tissue!)
- **Bigger** objects (houses, cars!)
- **Smaller** details (microscopic parts)
- **More colors** and textures

Jobs That Use 3D Printing

- **Engineers** design solutions to problems
- **Doctors** create custom medical devices
- **Architects** build scale models
- **Artists** create sculptures and art
- **Teachers** make educational tools
- **Inventors** prototype new ideas

If You Had a 3D Printer at Home

Dream Big!

What would you make?

- Replacement parts for broken toys?
- Custom organizers for your room?
- Gifts for family and friends?
- Tools for hobbies and sports?
- Art projects and decorations?

Continuing Your Learning

Keep Designing!

Ways to continue:

- **Tinkercad** is free - use it at home!
- **Village** 3D printers have extra capacity for you
- **Library** maker spaces often have 3D printers
- **Online tutorials** teach advanced techniques
- **YouTube** has thousands of 3D printing videos
- **Books** about 3D design and printing

Cleanup Time!

Final Cleanup (10 minutes)

- **Collect** your printed objects
- **Take** your reflection writing
- **Clean** your workspace
- **Say thank you** to classmates
- **Be proud** of what you've accomplished