Simple STEAM {Maker Space Task Cards}





20 engineering, art, and design task cards perfect for your Maker Space!

by Sarah Wiggins
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Thank you!!

Thank you so much for downloading this resource! I hope that you and your students love it! I am so honored that you took the time out of your busy day to visit my store. I appreciate you so much! And in case no one told you this today:

© You are an amazing teacher ©

Your feedback is important to me. You can reach me at sarah@morethanaworksheet.com Or you can also reach me using the Q&A section of my TpT Store,

More Than a Worksheet.

PS: I would LOVE to see pics of how you use my resources in your classroom!

If you are on Instagram, feel free to tag me @morethanaworksheet. I'm also on Facebook and Twitter!



Happy Teaching! Sarah

The More Than a Worksheet Promise:

I promise to create engaging learning experiences that first and foremost make students think. They are rigorous, standards-based, versatile, and perfect for the teacher who wants to light a spark in students. Teachers don't have extra time to re-invent the wheel with each lesson, but you shouldn't have to sacrifice good teaching practices in lieu of textbooks, test prep, worksheets, and standards. Let me help you add critical thinking, creativity, and fun into your curriculum!

Simple STEAM: Maker Space Task Cards {Aluminum Foil Edition} Notes to Teacher:

Thank you for purchasing this activity! I hope you and your students love it! This makes a great starting point for teachers just beginning their S.T.E.A.M. or Maker Space journey. The tasks in this series are simple enough that students can complete them independently, and they require just a few materials that are easy to come by. Don't be fooled by the simple nature, though. These challenges are designed to make your students think critically and creatively!

What is included?

*There are 20 task cards included with challenges, and I also included 4 blank ones for you and your students to use to create your own challenges. Just print and go. Laminate for durability if you choose.

- *A simple rubric
- *A student checklist

What materials do I need?

aluminum foil

How should I use these task cards?

I like to design products that are versatile and can be used in various ways to fit your needs. There is no one right way to use them, and I encourage you to try using them in different ways to find what fits best with your classroom. Here are some ideas:

- a Maker Space tub
- a science center where the challenge changes weekly
- a project that students work on in lieu of morning work with a new challenge each day
- fun whole class activities for the end of the year or the days before holidays
- send home for family STEAM time and have parent or students snap a picture of the completed challenge.
- a fun class reward for Fun Friday

What age are they best for?

These are perfect for grades 2-4. Some challenges may seem easy, and some may seem challenging. That is ok! These are naturally differentiated.

What S.T.E.A.M. components are addressed?

With these tasks, students will use creative thinking skills to tackle Engineering challenges. They will also tap into Art and design and some geometry and measurement skills.

Is there one right answer? No! Projects such as these are open ended on purpose. There is not a single right solution but many possible solutions that meet the challenge. It may be challenging for students at first to access the creative parts of their brains to think of innovative designs, but the more engineering, creative, and critical thinking activities you do, the more students get comfortable taking risks and finding creative solutions.

Should I show students examples first? I encourage you to let students attempt the projects before helping or showing examples. When students look at examples, they get it in their mind and think that there is just the one way to do it.

How do I grade these?

This is tough for me because I want students to be creative, think critically, and be able to learn from their mistakes, all of which can happen with these task cards. Yet, as teachers, we need to justify spending the time on activities, and a big way to do that is with grades. I created a simple rubric with that in mind. It addresses the skills that I want students to work on. I would love to hear your input because I realize there is no perfect way to grade activities such as this, so this is my attempt to try.

I'm hooked on S.T.E.A.M. What is my next step?

Visit my TPT Store for other STEM and STEAM resources. https://www.teacherspayteachers.com/Store/More-Than-A-Worksheet/Category/STEM

For more Maker Space Task Cards:

https://www.teacherspayteachers.com/Store/More-Than-A-Worksheet/Category/-Maker-Space-Task-Cards-259058

Simple S.T.E.A.M. Aluminum Foil Edition Examples

I provided examples for you, the teacher, to get ideas. I encourage you to let students build before showing examples. They will amaze you with what they come up with!

Task 5: Sculpture of a Person



Task 7: Pencil Grip





Task 6: Picture Frame



Task 8: Canoe

Task I

Design a hat that fits your head and would protect your hair from rain.

Materials: aluminum foil

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Simple S.T.E.A.M. Aluminum Foil Edition

Task 3

Design a key chain to hold your keys.

Materials: aluminum foil

Task 2

Construct a clasp that would hold your jeans closed if your button popped off.

Materials: aluminum foil

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Simple S.T.E.A.M.: Aluminum Foil Edition

Task 4

Invent a ball game that can be played on the table. Don't forget to come up with rules.

Materials: aluminum foil





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Task 6 Design and create a picture frame. Materials: aluminum foil

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Task 8

Design and create a canoe.

Materials: aluminum foil

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Task 9

Design and create a set of tweezers that can pick up small objects.

Materials: aluminum foil

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Task II

Create a model of a house.

Materials: aluminum foil

Task 10

Construct a cube made entirely of aluminum foil.
Can you make a hollow cube?

Materials: aluminum foil

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Task 12

Design a bridge that spans at least 15 cm.

Materials: aluminum foil

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Task 13

Design a new set of fashion jewelry or watches.

Materials: aluminum foil

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Task 15

Design an invention to keep your pencil from rolling off your desk.

Materials: aluminum foil

Task IH

Invent a new flying vehicle. Carefully test it out.

Materials: aluminum foil

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Task 16

Design and construct an umbrella.

Materials: aluminum foil

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Task 17

Create an invention that would help you clean up small toys like Lego bricks that have been spilled on the floor.

Materials: aluminum foil

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Simple S.T.E.A.M.: Aluminum Foil Edition

Task 19

Create a lunar rover, a vehicle to travel on the moon.

Materials: aluminum foil

Task 18

Construct a spinning windmill or pinwheel.

Materials: aluminum foil

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Simple S.T.E.A.M.: Aluminum Foil Edition

Task 20

Design a reusable device that keeps your drink cold in your lunch box.

Materials: aluminum foil

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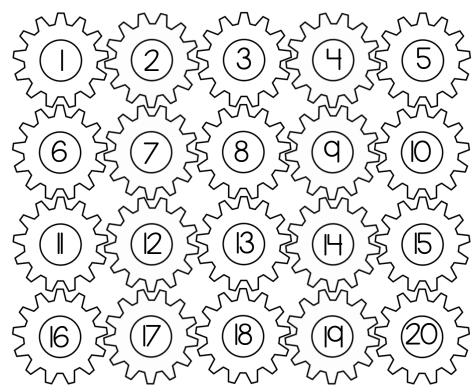
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Maker Space Task Cards {Aluminum Foil Edition}

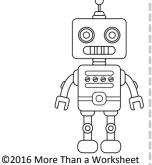
Use this page to keep track of the tasks that you complete.

Color in the gear when you complete the task card



Which task was your favorite? Why?

Which was your least favorite? Why?

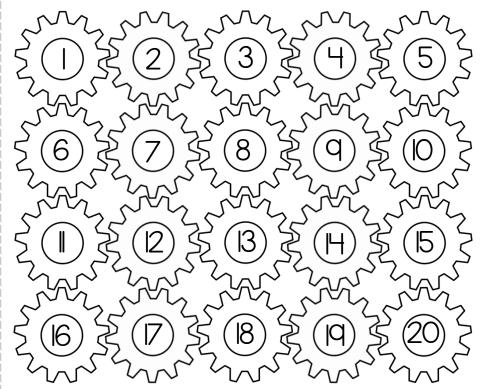


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Maker Space Task Cards {Aluminum Foil Edition}

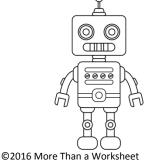
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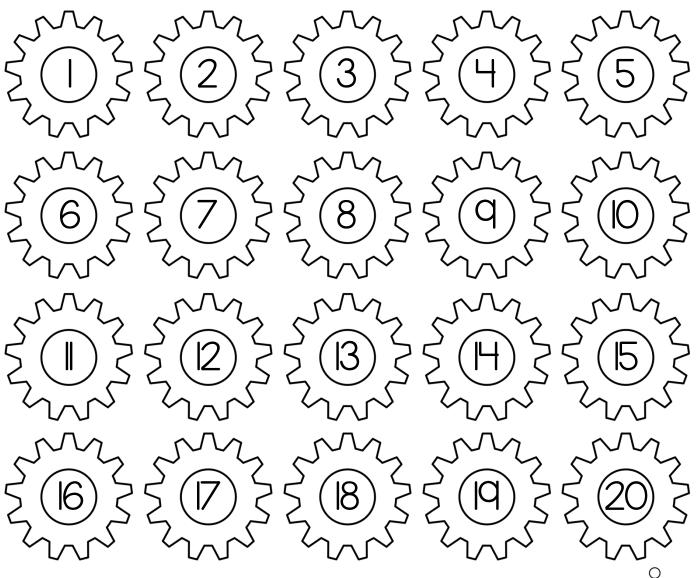
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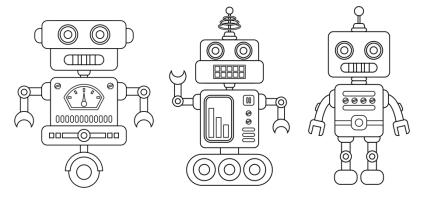


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Maker Space Task Cards (Aluminum Foil)

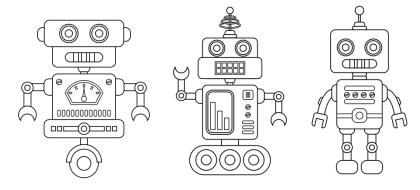


| | Rarely | Sometimes | Usually | Always |
|---|--------|-----------|---------|--------|
| I create original and innovative designs. | | | | |
| I try my best on all tasks. | | | | |
| I use all materials the correct way. | | | | |
| I work cooperatively with my teammates. | | | | |
| I am flexible if my design flops. | | | | |
| I am focused and engaged with the tasks. | | | | |

Grade:

| Name | | | |
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Maker Space Task Cards (Aluminum Foil)



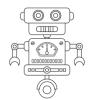
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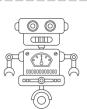
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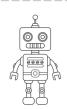
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Name

Maker Space Task Cards (Aluminum Foil)







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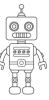
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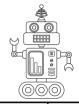
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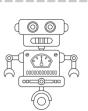
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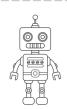
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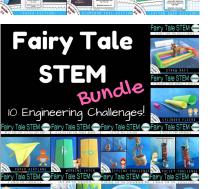
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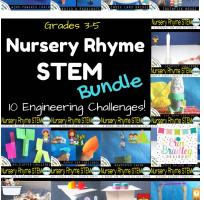
Grade:

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Please feel free to contact me with any questions, concerns, suggestions, or specific praise;) sarah@morethanaworksheet.com













































