

# Write me a SECRET

**HERE'S HOW YOU CAN WRITE IN A SIMPLE SECRET CODE THAT NOBODY ELSE CAN DECIPHER – EXCEPT FOR YOUR PARTNER IN CRIME, OF COURSE**

**C**ryptography, the use of codes to protect secrets, began thousands of years ago. The earliest known use of cryptography was found in hieroglyphs carved into tomb walls in Ancient Egypt, around 2000 BC. Since then, many cultures – across all eras – have written important information in code to keep important secrets, well, secret.

## REVERSE ALPHABET CODE

You can try this simple code with your sibling or best friend. Swap secrets and no one will ever know! Write the alphabet on a piece of paper, then write it backwards directly underneath your letters. To write your message, look at the top letters and write the bottom letters. To decipher it, find the letters on the bottom line, and write the corresponding letters from the top line. Szkkb Kozbrmt = “Happy playing!”

## MAKE YOUR SECRET ENVELOPE

Write your secret coded message inside an origami envelope. When your friend unfolds the paper, it will reveal the secret message.

## BE CAREFUL

The downside to development of codes is cryptanalysis: the “breaking” of codes. Let’s hope that there are no codebreakers in your house!

## BE CREATIVE

Leave your secret notes in unusual places – behind a mirror, under a pillow, at the bottom of a slide.

## TRY A SCAVENGER HUNT

This is a great activity for a party, camp, or a game with family. It takes a little bit more planning and time (plus permission from your parents), but you’ll have hours of fun. Have the last clue lead to a cool treat, choice of a film or extra time on the Xbox.

## MAKE A SECRET SQUARE NOTE:

- 1** Write your message on a piece of paper. You can use the paper provided, or an A4.
- 2** Fold it lengthwise, hot-dog style, along the vertical axis. Make sure the side with writing on it is facing the inside, so you can’t see it.
- 3** Fold the paper hot-dog style a second time. Now you have a long, thin piece of paper.
- 4** Then, fold triangles on each side by folding them over diagonally. Make sure the two edges of the triangles are parallel, like a parallelogram (two pairs of two parallel sides).
- 5** Fold each triangle over diagonally again, forming a thin parallelogram on each end. Make your fold so that the edge of the triangle that’s closest to the centre of the rectangle moves up so that it’s parallel to the long side of the rectangle. You should create something that looks like an “S” turned 90 degrees counter-clockwise.
- 6** Fold the edges of the parallelograms facing the centre straight over. You should have two triangles making a square shape in the centre, with an equally-sized triangle sitting on each side.
- 7** Tuck the triangles underneath the opposite sides and you have yourself a secret note!

**TIP:** You can watch a video on folding a secret square note on [www.wikihow.com](http://www.wikihow.com)









**HAVING BIG DREAMS IS WONDERFUL! BUT IF YOU DON'T HAVE THE TOOLS TO MAKE THOSE DREAMS A REALITY, THEY CAN END UP FEELING MORE LIKE A NIGHTMARE. TO HELP YOU THINK ABOUT YOUR BIG DREAMS, WE'VE MADE A PATH FOR YOU TO FOLLOW. FOLLOWING LIAM'S ADVICE ON MAKING YOUR DREAM A REALITY, TRY ANSWERING SOME OF THE QUESTIONS ON THE WAY. WHEN YOU DO, COLOUR IN THE PIECES OF YOUR DREAM PROGRESS PIE!**

**SOMETHING I WANT TO ACHIEVE AT SCHOOL**



\_\_\_\_\_

This is a goal for me because...

\_\_\_\_\_

Who I can ask for help...

\_\_\_\_\_

How I can take a self-care break along the way...

\_\_\_\_\_

What's a little achievement along the way?

**SOMETHING I'D LIKE TO DO WITH MY FAMILY**



\_\_\_\_\_

I think we'd have fun because...

\_\_\_\_\_

Who do I need to talk to about this dream?

\_\_\_\_\_

My favourite quote about family is...

\_\_\_\_\_

What's my first step in making this dream come true?

## A NEW HOBBY



How I can get started...

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I can practise at this time each week...

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What inspires me about this hobby?

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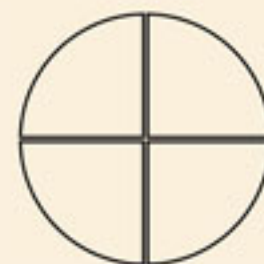
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What's one thing I really want to achieve with this hobby?

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## A NEW SKILL



The first step I need to take is...

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Something I'll enjoy about learning this skill...

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Why do I want to learn this skill?

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How I can pick myself up if I make a mistake along the way...

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## I WANT TO BE A...



This is my dream job because...

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Who I can ask for help...

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What I might need to help me achieve my dream...

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What's a little achievement along the way to my big dream?

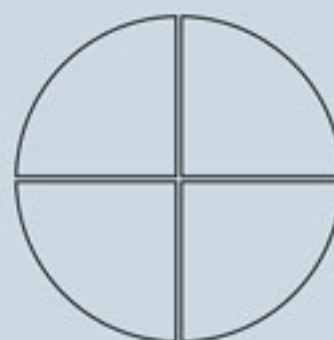
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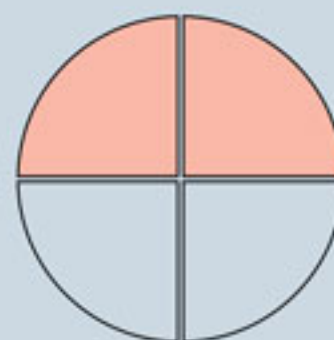
## ENJOY THE JOURNEY!

Here we go. At the end of the day, this is what it comes down to. Think about how you can enjoy the journey of achieving your goal because ultimately that's how you're spending your time.

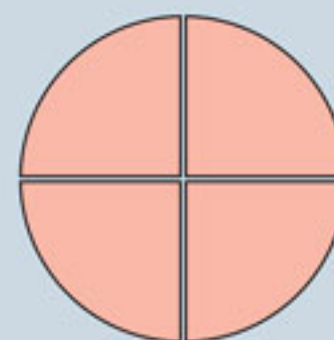
## PROGRESS PIE



not started



half completed



completed



# BUILDING A BILLYCART

**CREATING A BILLYCART MAY SEEM LIKE A CHALLENGING TASK WITH LOTS OF DIFFERENT PARTS. LUCKILY, IT'S NOT AS TOUGH AS YOU MIGHT THINK. NOT ONLY DOES IT HELP WITH BASIC UNDERSTANDING OF WOODWORK AND ENGINEERING, IT'S A FUN ACTIVITY TO DO WITH FRIENDS OR FAMILY.**

**A**lways start with the basic structure and materials that all billycart designs use. Many cart builders will adapt and evolve their own design from here to create the fastest, meanest billycart around.

To build a billycart, you will need metal and wood materials from a hardware store. Tools like saws, drills, hammers, and spanners will require guidance from your parents, older siblings, or teachers. They will help you gather the materials and use tools correctly and safely. The cart is usually built in a few parts:

## **FRONT AND REAR AXLE**

An axle is a rotating wheel or gear on vehicles that controls the steering. Ropes or pulleys attach so the driver can pull left or right to steer the cart.

The rear axle is at the back of the billycart and works like the front. Make sure the front and rear axles all match in length. This may require a saw and some help to correctly measure.

## **CENTRE AND SEAT**

This is the body of your cart. The centre board will connect the front and rear axles together to hold the cart in place. Once a nice, comfortable seat is secured in place, the billycart is nearly complete.

## **BRAKE AND FOOT REST**

It is critical that every billycart has a brake and foot rest. The brake will help slow and stop the vehicle. A driver never wants to go too fast as it may compromise the integrity of the cart and cause it to fall apart and risk serious injuries.

## **WHEELS**

Your billycart isn't going anywhere without wheels! If you're not sure about where to begin, look at your old bicycle wheels. Are they too big for your billycart? Or can you repurpose something else from around you? And remember, the bigger your wheels the faster your billycart.

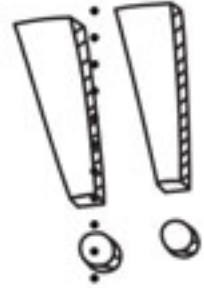
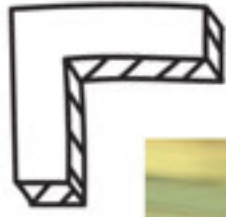
Now that you know the important parts of a billycart and how they work, you can start building! Find easy instructions online and don't forget to ask for some help. Soon enough you'll be the next Lewis Hamilton in all billycart rallies.

Words by: Omi Koulas



Visit [www.instructables.com](http://www.instructables.com) where Scitech WA has shared a Components List with all the parts you'll need plus a guide to building your own Billy Cart Racer





**REMEMBER:** Safety first! Always wear a helmet when operating your billycart, and ask a parent or guardian to help with building, testing, and racing your new speed machine.





# MY BILLYCART checklist

## WHAT SORT OF BILLYCART DO I WANT TO BUILD?

Before you start building, you'll need to design your billycart. Do you want to use a rope, a wheel, or your feet for steering? How long and how wide do you want it to be? What sort of seat will it have? Are you going to paint it hot rod red? These are the big planning questions. Draw your ideas here!



**WHAT WILL I NAME MY BILLYCART?**

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**WHO DO I NEED TO ASK FOR HELP?**

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**WHAT MATERIALS AND TOOLS DO I NEED?**

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**WHERE CAN I RACE IT?**

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# Podcast POWER



## PLUG YOUR EARPHONES IN AND GET INTO A GREAT PODCAST

**W**hen you hear the word podcast, you might picture your parents listening to boring chatter in the morning car ride, or while they do busy work around the house. A show or a conversation that is 100 percent audio? No pictures? Where's the fun in that? Well, there is an amazing thing that happens when you listen to podcasts. Because there is no screen to stare at, your brain gets a chance to stretch its beautiful imagination and you become fully immersed in the story or conversation, painting your own version of it in your head. Podcasts are also a wonderful key to mindfulness

and relaxation. Instead of listening to a podcast and doing chores or homework, try going for a walk, colour, or make your favourite meal. You'll be surprised by how much better you'll feel by the time the podcast ends.

Some podcasts are scripted audio stories that feature main characters and a fully functioning plot, whereas others can be anything from a really interesting conversation to interactive game shows that question the meaning of life. There are so many different podcasts out there, it can be a bit daunting to find out where to start. Don't worry, we've compiled a list of our top 5 favourites for you to try out.



# TOP 5

# MOST

# AWESOME

# PODCASTS



## PANTS ON FIRE

[www.bestrobotever.com/pants-on-fire](http://www.bestrobotever.com/pants-on-fire)

There is no denying that we live in an important time of history where being able to tell the difference between truth and fiction is essential. That's where this podcast comes in handy, challenging you to spot a lie. And what better way to test your truth-o-meter than with a game? Designed for fun, but riddled with interesting facts and tricky contestants, this podcast is a true delight so listen to with lots of laughs and surprising twists.

**Where to start?**

*Hypnosis*

Listen to two hypnosis experts answer questions and decide which one is lying. Were you right?

## BRAINS ON!

[www.brainson.org](http://www.brainson.org)

Listen in on this award-winning science podcast that tackles questions big and small, sent in by kids from all around the world. They strive to make learning and science fun and interesting, and there are over 100 episodes to choose from, so you will never be bored!

**Where to start?**

*Black Holes, Wormholes and Donut Holes*

In this episode, explore how black holes are made and how we've discovered them, what a wormhole is, and what it might be like to travel through one.

**BECAUSE THERE IS NO SCREEN TO STARE AT, YOUR BRAIN GETS A CHANCE TO STRETCH ITS BEAUTIFUL IMAGINATION AND YOU BECOME FULLY IMMERSSED IN THE STORY OR CONVERSATION, PAINTING YOUR OWN VERSION OF IT IN YOUR HEAD.**

## ELEANOR AMPLIFIED

[www.whyy.org/programs/eleanor-amplified](http://www.whyy.org/programs/eleanor-amplified)

Follow Eleanor, a modern-day Nancy Drew and world-famous reporter, as she saves the day from the malicious villains, and helps you gain a greater appreciation for journalism and the pursuit of the truth. This podcast is a scripted adventure that will be sure to raise important discussions and make you gasp while hanging on to the edge of your seat.

**Where to start?**

*Ep 01: Pilot (Robot)*

Listen in on Eleanor's first adventure as she takes you on a journey to hunt down the bad guys.

## THE UNEXPLAINABLE DISAPPEARANCE OF MARS PATEL

[www.marspatel.com](http://www.marspatel.com)

In this award-winning podcast, Mars and his friends are on the case after their friends start disappearing. Through their adventure, they unravel secrets and go to places that are, quite literally, out of this world. Similar to *Stranger Things*, this podcast will transport you to another world. There is a total of three seasons so far, but there is sure to be more to come.

**Where to start?**

*S1 E1: Code Red*

This is the first episode of the podcast where Mars Patel and his friends start their investigation into the disappearance of their classmates.

## SHORT & CURLY

[www.abc.net.au/radio/programs/shortandcurly](http://www.abc.net.au/radio/programs/shortandcurly)

In this comedic ABC podcast, hosts Matt, Molly, and Carl navigate their way through ethical dilemmas and delve into how to deal with asking the big questions in life. Their topics range from school, pop culture, to the future of life itself. With titles that go from 'What is discrimination and is it always bad?' to 'Did Carl really see a UFO?', there is sure to be some important and fun conversations to uncover.

**Where to start?**

*What is discrimination and is it always bad?*

This episode explores what discrimination means, why it happens, and how you can help if you ever see someone being discriminated against.