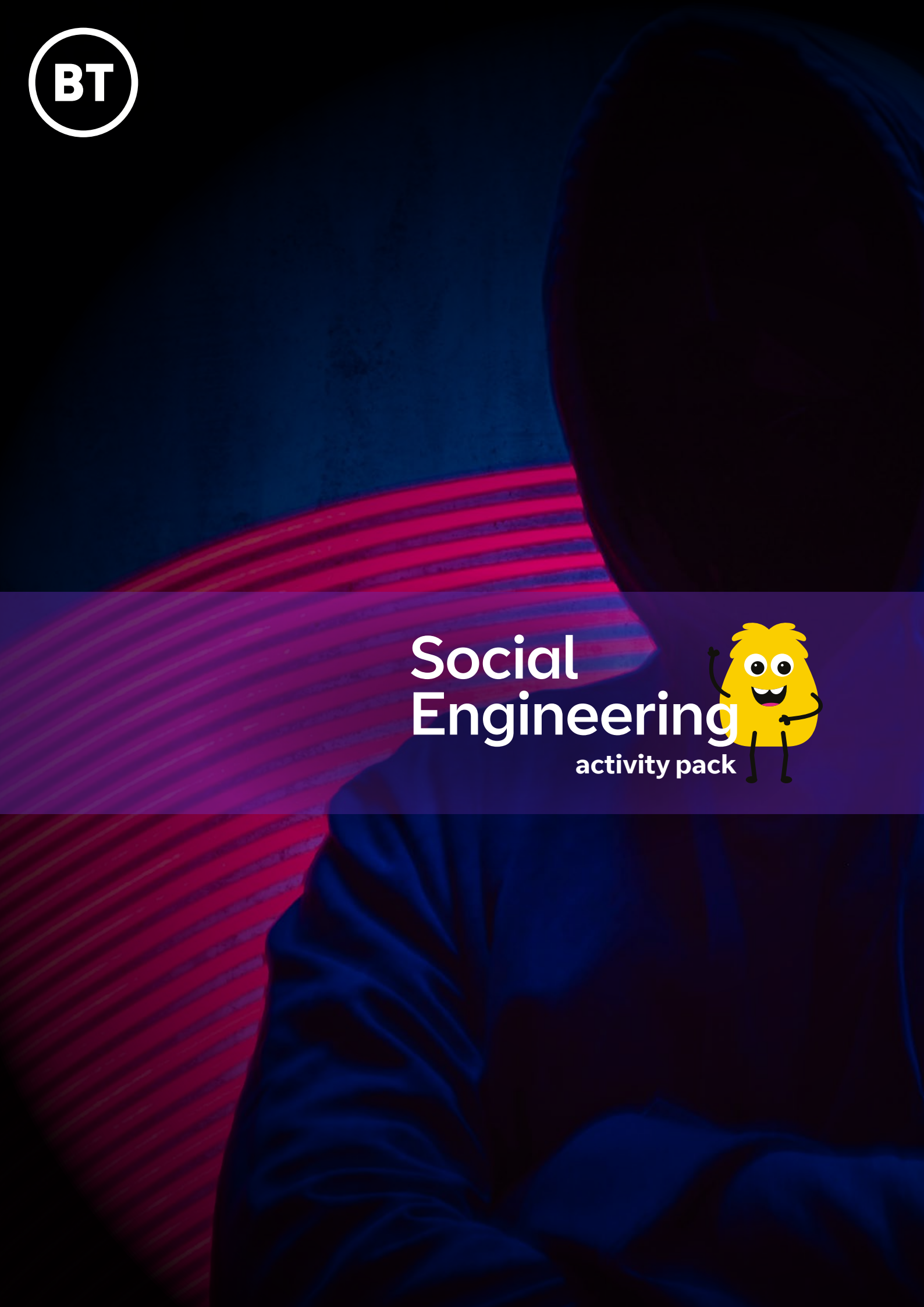
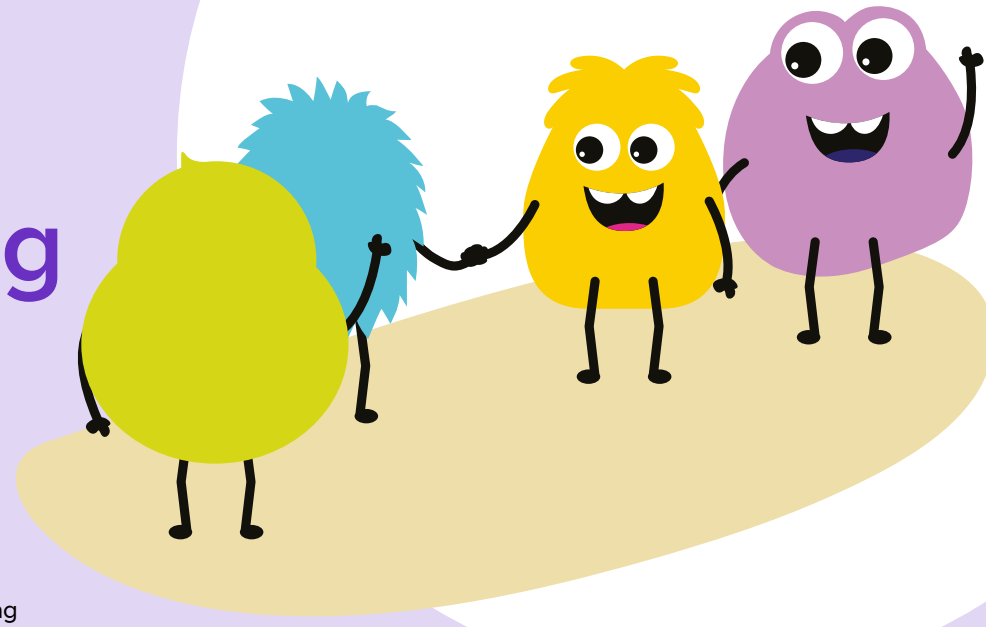


Social Engineering

activity pack

Social Engineering



Social engineering is a fascinating subject that delves into human psychology, focusing on our behaviours when interacting with one another. Imagine being able to influence people's thoughts, behaviours, or decisions without them realising – that's the essence of social engineering.

While it might sound like something out of a spy movie, social engineering is very real. It is a technique employed by criminals to manipulate others for various purposes.

This activity pack is focused on data security. Social engineering from this perspective is the art of criminals targeting our human psychology. More specifically exploiting the trust we place in other people that makes us feel safe enough to share our personal information with them. Alternatively, it can be capitalising on our natural human tendencies, such as the desire to help or the fear of missing out.

Acquiring information like this allows the scammers to illegally gain access to personal information, computer systems, or get at our confidential data like passwords or bank details.
It doesn't involve hacking into computers or using complex algorithms; instead, it relies on understanding how people think and react in certain situations. This makes it particularly dangerous in our digitally connected world, where personal information is freely shared online.

Learning about social engineering not only increases your knowledge about cybersecurity and cybercrime, but it also enables you to be better prepared to tackle every day social interactions you have online and face-to-face.

Be wary out there, not everyone is as trustworthy as they may seem!

Teacher Links

- A lesson plan for a safety and security module https://tinyurl.com/yts55czc
- Do the right thing - Cyber/Online Safety https://tinyurl.com/mryp4xx9
- Introduction to cyber security lesson plans https://tinyurl.com/2ywumz3m
- Let's Chatterbox - Cyber/Online Safety https://tinyurl.com/mt6jmnv4
- CyberFirst Navigators - some interactive online security resources on how to stay secure online https://tinyurl.com/2yjkp763

Find Out More

- Hello World – Download your free issue all about Cybersecurity https://tinyurl.com/2dt5647h
- Katie and Tex explore cyber security https://tinyurl.com/4e7um57h

Have A Go

- Learn how to create and use an encryption technique known as the one-time pad https://tinyurl.com/ycx92n9u
- Code your own random username generator https://tinyurl.com/463abbz6
- Code your own random password generator https://tinyurl.com/3fvy7dpy

We'd love to see pictures of you all getting involved with the activities. Email these to us at **computerscience@bt.com** telling us which school you're from.

Cyber Live

Grok Academy have some brilliant online resources for both physical and cyber security including activities, videos, and games.

But for this activity they have shared their Cyber Live exercise with you all...

There's been a major incident that needs your help! Here's what has happened so far:

A Navy Captain is held captive inside their ship at Sydney harbour. A major landmark has gone dark. And weapons are pointed at Sydney's busiest sites. It's all connected, and it's up to you to free the captain, track down the culprit, and stop them.

Kit List

- **Computer with internet connection**
- **Paper**
- **Pens or Pencils**

Instructions

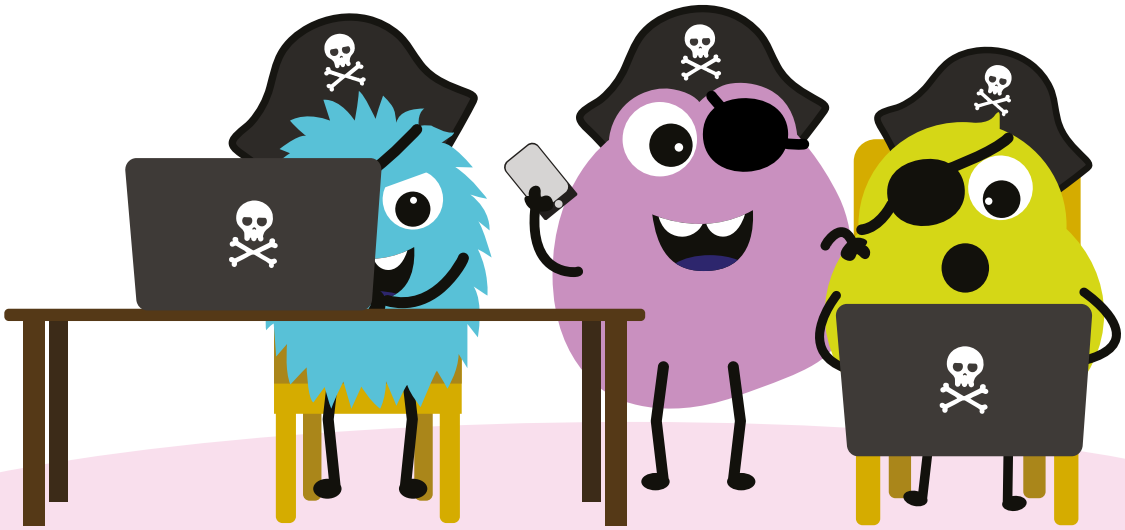
1 You will need to trace clues, solve puzzles, and figure out how to stop a large scale simulated cyber-attack before it's too late.

Can you stop the cyber-attack in time?

You'll need a computer to do it, and you may want some paper and a pen to make notes. But good luck and click this link to take you there.

So that you can explore some of their other excellent online resources, Grok Academy have kindly set up a link to take you there.

Visit it here: **https://tinyurl.com/yp87xh5w**



Know Your Risks

What information is safe to share online? This activity will help you understand the risks. The first step in understanding cyber security is knowing how to keep you and your information safe from people that shouldn't have access to it.

The information that people can find out about you online is called your digital footprint. You can decide what you share, and what you keep private. You can also look after your friends and family by being careful about what you share about them.

Learn about whether to share, not share or be cautious with different pieces of your personal information when posting online.

Kit List

Print out Templates on Pages 8-13

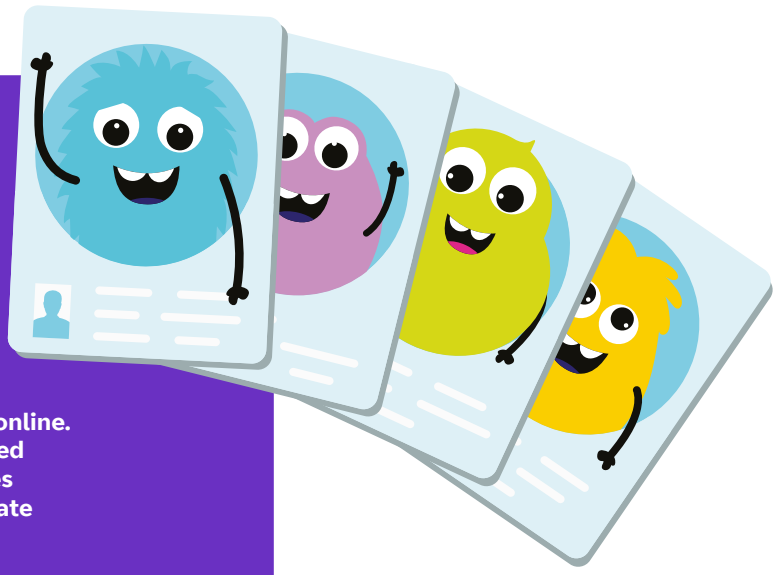
Scissors

Instructions

1. Print out the Templates on pages 8-13.
2. Cut out all of the cards – you should have 25 in total (they are double-sided).
3. Stack them in a pile, picture-side facing up, and shuffle the deck.
4. One person should draw a card and read what it says on the picture-side out loud.
5. In your pairs/group, you should discuss whether you think it is ok to share this personal piece of information online or not.
6. Organise the deck of cards into 3 piles:
   - OK to share
   - Share with caution
   - Don't share
7. Once you've sorted them all, go through each card one-by-one, turning them over to reveal what the answer is. It will also explain why you are ok to share it or why you shouldn't share this information.
8. Have a discussion in your class about whether you agree or disagree with these and explain why.

   Can you think of any examples you've seen of people sharing information online that you now think should have been kept private?

Profile Check-Up



We share lots of information about ourselves online. Some of this information is private, and we need to be careful who it is shared with. Small pieces of information can be combined to reveal private information.

Here's a quickfire activity to test what you've learned from the previous activity.

Kit List

Print out Template on Page 14

Pens or Pencils

Instructions

1. Print out the Template on page 14.
2. Take a look at Belinda Brooks' profile. It's from their social media app called Fistbump.
3. Using your pen or pencil, circle 5 pieces of personal information that Belinda has shared that you think shouldn't be posted online.

Activity 4

The Phisherman & Staying Safe Online

It's important that we all take both physical and cyber security very seriously.

To be better prepared, it's always good to know the potential ways in which people may try to attack you.

Therefore, we should all be doing some level of security training. Here are some you can try...

Work your way through the different questions, exercises, tips and tricks to make sure you're ready to tackle the digital world and keep your personal data secure!

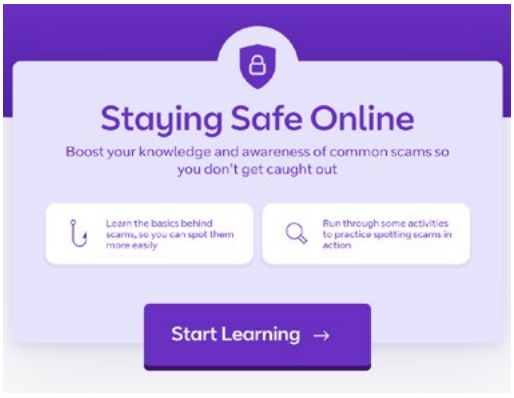
Kit List

Computer with internet connection

Instructions

1 For ages 7-11, click here to visit the Phisherman.

2 For ages 12+, click here to try Staying Safe Online.



Activity 5

Scam Detective

This quickfire activity aims to help you spot common features in scams and phishing messages, and test what you've learned from the previous activity.

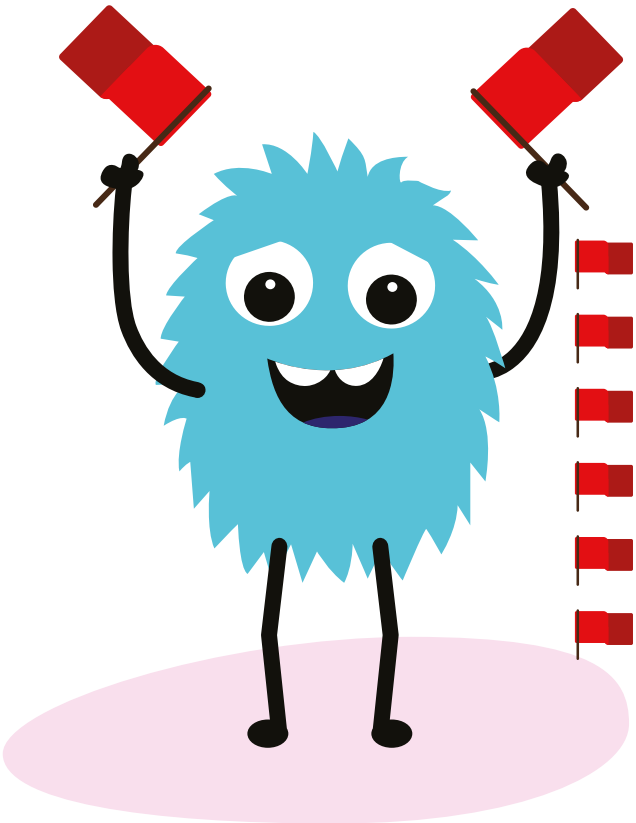
Kit List

Print out Template on Page 15

Pens or Pencils

Instructions

1. Print out the Template on page 15.
2. Using your pen or pencil, circle all of the red flags you can see, and make a note of them below each image. Be sure to explain why you think what you've circled is a red flag.



The red flags are:

- If you're put **under pressure** to answer quickly and act fast
- If what they're offering is **too good to be true**
- If it's an **unsolicited message** (you didn't ask for it)
- It's from an **untrusted source**
- There's **dodgy design**
- It's a **strange request** from someone you know or a well-known business

grok academy

Digital technologies and computing resources for your classroom.

Sign up your students at:
grok.ac/cyber

grok academy | Schools Cyber Security Challenges

Teaching cyber security?

- FREE interactive classroom activities
- Aligned to the Digital Technologies curriculum
- Professional development for teachers
- Intelligent automatic feedback

Sign up your students at:
grok.ac/cyber

Your Name

Left- or Right-Handedness

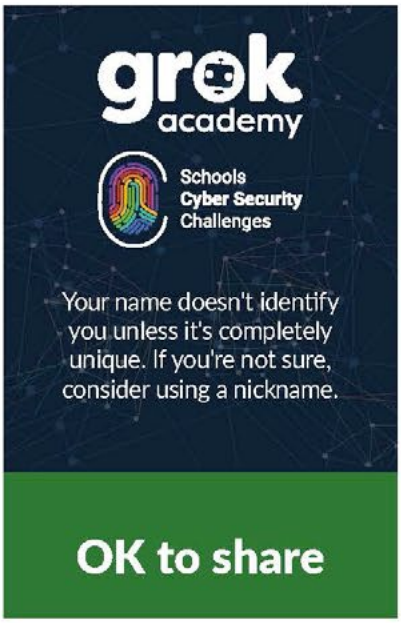
Hair Colour

Your Nickname

The Weather

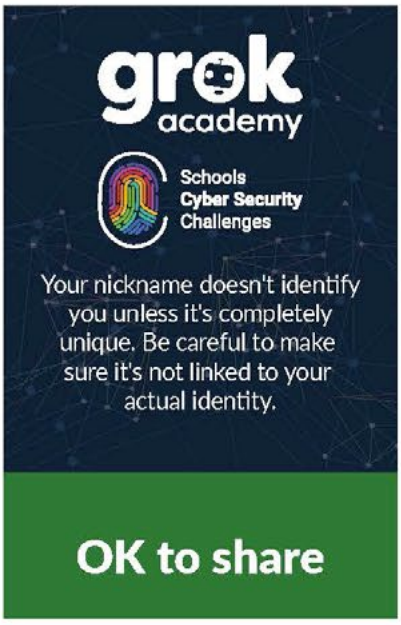
Your Town or City

Hobbies & Sports


grok academy
Schools Cyber Security Challenges
Your name doesn't identify you unless it's completely unique. If you're not sure, consider using a nickname.
OK to share

Schools Cyber Security Challenges are brought to you by
ANZ
aws
Australian Government
Australian Signals Directorate
Australian Government
Department of Industry, Science, Energy and Resources
BT
Commonwealth Bank
FIFTHDOMAIN
SECURING CYBER SKILLS
nab

grok academy
Helping teachers implement the Australian Curriculum Digital Technologies
Online coding competitions and challenges for students in years 3-12
Workshops and online courses for teachers
Expert email and online advice and support for teachers
grok.ac/cyber


grok academy
Schools Cyber Security Challenges
Your nickname doesn't identify you unless it's completely unique. Be careful to make sure it's not linked to your actual identity.
OK to share

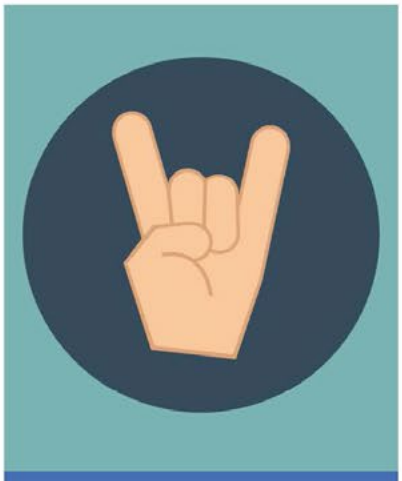
grok academy
Schools Cyber Security Challenges
Your hair colour is safe to share. It might help you be identified if someone finds a school photo, but it's generally fine.
OK to share

grok academy
Schools Cyber Security Challenges
Your handedness might narrow you down to one person in ten, but it's probably not going to identify you.
OK to share

grok academy
Schools Cyber Security Challenges
Your sports and hobbies are great to share - it's a lot of what social media is for! But don't use them as part of any of your passwords, since they're easily found out.
OK to share

grok academy
Schools Cyber Security Challenges
Your town might help to separate you from people with the same name, but it's unlikely to locate you. Be aware that information can be combined though!
OK to share

grok academy
Schools Cyber Security Challenges
Go for it!
Share as much weather as you feel like!
OK to share



Favourite Band

GIFs

Memes

Banking PIN

Home Address

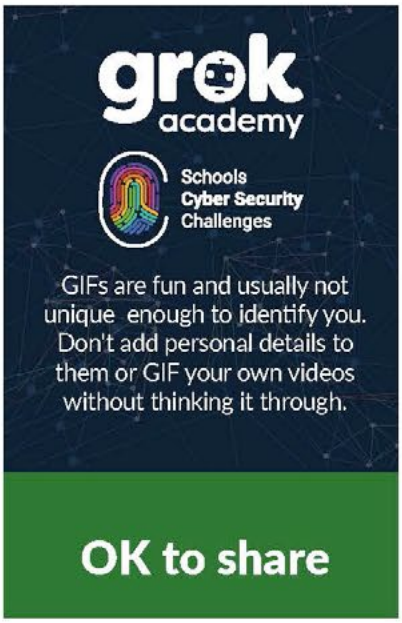
Pet's Name

New Drivers' License

Login & Password

Banking Details

grok academy
Schools Cyber Security Challenges
Memes are fun and usually not unique enough to identify you. Don't add personal details to them.
OK to share


grok academy
Schools Cyber Security Challenges
GIFs are fun and usually not unique enough to identify you. Don't add personal details to them or GIF your own videos without thinking it through.
OK to share

grok academy
Schools Cyber Security Challenges
Share your favourite band! They won't identify you and won't give away your location. Don't use them as part of a password as they are easily found out.
OK to share

grok academy
Schools Cyber Security Challenges
Your pet's name is not going to identify you, and won't give away your location. Don't use it as part of a password as it's often easy to find out!
OK to share

grok academy
Schools Cyber Security Challenges
Sharing your home address can allow people on the internet to find your physical location. This isn't a great idea so only share it with people you trust.
Don't share

grok academy
Schools Cyber Security Challenges
Don't share your PIN! There's no trick here, this would be a bad idea. If you do share it accidentally, make sure you change it immediately!
Don't share

grok academy
Schools Cyber Security Challenges
Giving away too much banking information can put your money at risk, and even your identity.
Don't share

grok academy
Schools Cyber Security Challenges
Don't share your login and password with anyone without a very good reason. Getting a friend to submit homework on your behalf is not a good reason.
Don't share

grok academy
Schools Cyber Security Challenges
A driver's license is a legal document that can be used as proof of ID. Your identity is at risk if you share a photo of it. Show people the photo in person!
Don't share

Geotagged Photos

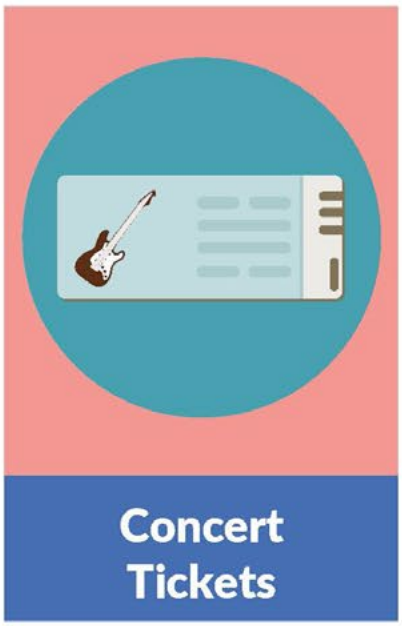
Birthday

Holiday Location

Email Address

Check-in Location

Mobile Number



Concert Tickets

Photos

School Name

grok academy
Schools Cyber Security Challenges
Holidays are great and worth boasting about but don't advertise the fact that your house is empty.
Share with caution

grok academy
Schools Cyber Security Challenges
Dates of birth can be used to identify you. Your birthday (without the year) is probably fine. Remember that information can be combined to make you identifiable.
Share with caution

grok academy
Schools Cyber Security Challenges
Geotagged photos can be used to identify you and locate you. It's like "checking in" somewhere; use caution or at least post later, when you are not at the location.
Share with caution

grok academy
Schools Cyber Security Challenges
Your mobile number can be used to send unsolicited messages, spam, or worse. Only share it with people you trust.
Share with caution

grok academy
Schools Cyber Security Challenges
Checking in somewhere allows people on the internet to find your physical location. This sort of thing should probably only be shared with those you trust.
Share with caution

grok academy
Schools Cyber Security Challenges
An email address may seem harmless to share, but it's often used as your login for websites. It's also really easy for software to find an email address for spam.
Share with caution

grok academy
Schools Cyber Security Challenges
Be careful as sharing the school you attend can help people from the internet find your location. Remember that information can be combined to make you identifiable.
Share with caution

grok academy
Schools Cyber Security Challenges
Photos can contain lots of clues about where you live, your physical location, and your likely movements. Be careful about what you choose to share.
Share with caution

grok academy
Schools Cyber Security Challenges
A concert ticket can be used to locate you, or if the barcode is shared, other people could print out a copy and go to the gig instead of you! Save the pics to share later.
Share with caution

Profile Check-Up Template

FISTBUMP PROFILE

fistbump

Find five things on Belinda's profile that she should consider changing.

September

6 Riverview St

Bay West

Riverside High

Status

Woo! Personal best on my regular 3 km run.
Feeling great right now!

Recent posts

Can't believe this is the view from the end of my street!!?! Good job parents!

12 fistbumps

Suggested to mum that I might clean my room later and ... 💥

32 fistbumps

I could finish doing this English homework, or I could go for a run 🏃🤔

9 fistbumps

Me: <runs out of phone battery>
Me later: OMG like everything happened on FB while I was gone!

21 fistbumps

Breakfast of champions! At least my team hopes so!

13 fistbumps

Where can you find me every Tuesday? @Allison meet me at the oval at 6?

6 fistbumps

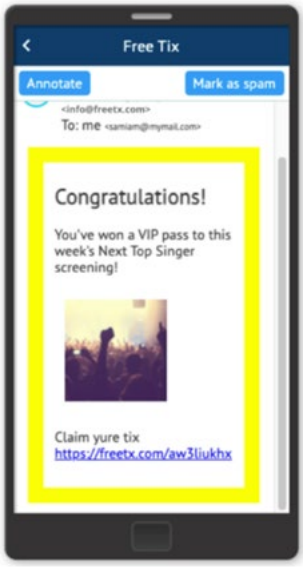
Doing Monday like a boss 💪😎

17 fistbumps

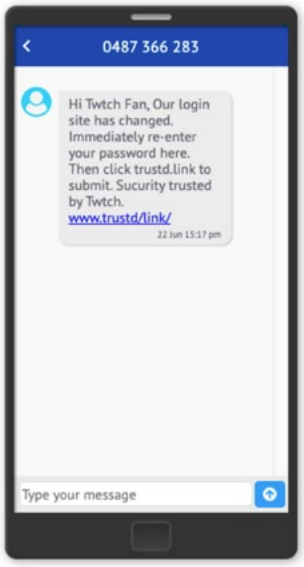
How good are 🦙 I mean seriously?

43 fistbumps

Scam Detective Template

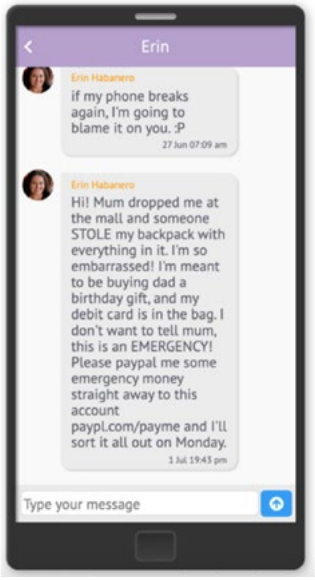


Red flags:



Red flags:

Red flags:



Red flags: