YEAR 3

LEARNING

- FROM -

HOME

VOLUME 2

teachstarter

About this Pack

The Teach Starter team has handpicked this learning from home resource pack to include a range of resources that children can complete at home with the assistance of parents or guardians in the event of schools being closed or during homeschooling.

Included resources cover the key learning areas of English, Maths and Science, along with some additional craft and mindfulness activities – all for free!

If a student needs to work remotely, this pack can be sent home with children or emailed directly to parents and guardians digitally, to allow for students to complete the work remotely with minimal preparation and supervision.

The pack is designed to allow non-teachers to understand and set the tasks and activities in a home environment, without requiring additional resources found in a classroom. The pack can be completed digitally on a tablet/iPad or with pen and paper when printed.

For Teachers

Can I share this pack with parents, students and other teachers?

Of course! This pack has been created specifically to support teachers, guardians and parents with children who are learning remotely or being educated at home, so feel free to share it with others.

You can share it by copying the URL in the address bar of your browser, or by clicking on the envelope icon above to send the link to an email address. You can also download the pack and email the PDF document to parents who are educating their children at home.

Please feel free to bundle this pack with your own home learning or homeschooling activities to extend or reinforce particular concepts for your students. You may also like to add specific activities such as reading, outdoor play, fine motor skills, etc.

For Parents

How can I teach my child from home?

Downloading this free resource pack will equip you with a range of activities to share with your child while their school is closed or while they are learning remotely from home.

We have provided a helpful table of contents and activity overview to ensure that non-teachers can use and deliver this pack easily. All activities are age-appropriate, can be completed in any order, and relate to work that your child has probably already experienced in the classroom.

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Year 3

Contents

English

Reading

5 x Magazine Articles and Comprehension Activities
Students read the text and complete the comprehension questions.

Punctuation and Grammar

4 x Punctuation Worksheets
Students complete the worksheets, which focus on sentence boundary punctuation and apostrophes in contractions.

How to Make Pancakes: Article Edition
Students read over the procedure about making pancakes and then fill in the blank spaces with the appropriate articles (i.e. 'a', 'the' or 'an').

Informative Writing

Fact File – Eagles
Students use the fact file to gather information from the dot points and convert them into full sentences on the template provided. They then use the informative text scaffold to develop paragraphs from these key sentences.

Procedure Writing

How to Make …
Students read the stimulus and outline the topic for their procedure. They use the Procedure Text Writing Scaffold to write their procedure.

Maths

Maths Warm-Ups

4 x Times Tables Quiz
Each quiz focuses on multiplication facts of two, three, five and ten.

4 x Maths Mentals
These questions include simple number sentences, word problems, fractions, geometry and chance.

Problem Solving

Open-Ended Maths Task Cards

These problems range in focus from multiplication and division to geometry. Due to their open-ended nature, these questions do not have specific answers.

Money Matters

Students read the task card and find a shopping receipt or catalogue. They choose three items and determine their total cost.

Location and Transformation

Coordinates Drawing

Students read and interpret the given coordinates to draw lines that complete a picture.

Operations

3 x Colour Fun! and 5 x Colour Fun!

Students are required to find the answer to each multiplication sum and then colour that section the corresponding colour represented in the key provided.

Geometry

3D Object Nets

Students decorate the nets of a chosen 3D object. They colour each face a different colour and then cut and assemble. Multiple 3D objects can be combined to create a miniature town or city.

Science

Keeping Out the Heat

This experiment aims to determine what material is the best thermal insulator. Students complete the experiment's write-up and prepare and gather the required materials. They then follow the method, collect the results and complete the discussion.

Make an Eggshell Disappear

This experiment explores chemical reactions. Students read the information and the procedure for the experiment and gather the required materials. On the notes page, students draw a prediction of what might happen to the egg. They follow the final steps of the experiment and record the results.

STEM

Design Technology Task Cards

Students complete the design challenges, using the following materials and time allocations.

Best Dressed – Time Allocation: 20 minutes

- Newspapers
- Scissors

- Tape

Build a Bridge – Time Allocation: 20 minutes

- Straws/sticks (as many as you need)

- Scissors

- Tape

- Toy cars

Visual Arts

Textured Mandala, Crazy Hair Line Drawing and Patterned Hand Art
Students follow the directions for each activity to create artworks that focus on pattern and line.

Monster Bookmark Craft
In this craft activity, students create a corner bookmark. Encourage them to design a pattern for their monster's fur/skin.

- Print the Monster Corner Bookmark template.
- Cut along the outside of the template design.
- Fold the triangles on top of each other and paste the two triangles together, creating a pocket.
- Decorate your design by colouring the template.
- If possible, glue some googly eyes onto the bookmark.

Mindfulness Pattern Colouring
Students use this colouring sheet when they require a brain break or at the end of the day.

SPECIES SNAPSHOT
Naked Mole Rat

Mammals give birth to live young, produce milk for their babies, have hair and are warm-blooded — right? Well… while most mammals have these features, there are some exceptions. Introducing… the naked mole rat! It may not be the most attractive critter you've ever seen, but it has some unique characteristics.

DESCRIPTION

An adult naked mole rat is about 7–13 centimetres long and weighs 35 grams (about the same as a teaspoon of yoghurt). It has extremely wrinkly, pinkish skin with very little hair. The few hairs it has do not keep the mole rat warm. Instead, the hairs act like whiskers, helping the mole rat sense its environment.

Naked mole rats find it hard to maintain a steady body temperature. This means they are not true warm-blooded animals. They often rest together in piles to keep warm.

Perhaps the mole rat's most noticeable feature is its long front teeth, which resemble mini chopsticks. Not only do the teeth look like chopsticks, but each tooth can also be moved separately — in the same way chopsticks move! The teeth are actually *outside* the mole rat's mouth. Because these amazing animals use their teeth to dig tunnels, their lips close behind the teeth so they don't end up with a mouthful of dirt when digging.

Most rodents of this size live for around 4–6 years. Naked mole rats can live for more than 30 years!

HABITAT

Naked mole rats spend their lives underground in semi-arid areas of Kenya, Ethiopia and Somalia.

Their burrows are complicated but well-organised. Special chambers, like rooms in a house, are connected by tunnels. The chambers include the feeding chamber where food is stored, the nesting chamber where the pups (babies) are cared for, and a toilet chamber — we can all guess what happens there!

Litter size varies greatly in mammals. The average litter of naked mole rats is about 15 pups, but some mothers can have a whopping 30 pups in one litter! Among mammals, that is one of the largest litters of all.

DIET

Naked mole rats eat tubers, which are the underground parts of plants. Sometimes, these tubers are as big as pumpkins. As well as being a food source, the tubers 'hydrate' the mole rats, which means they provide the rats with water.
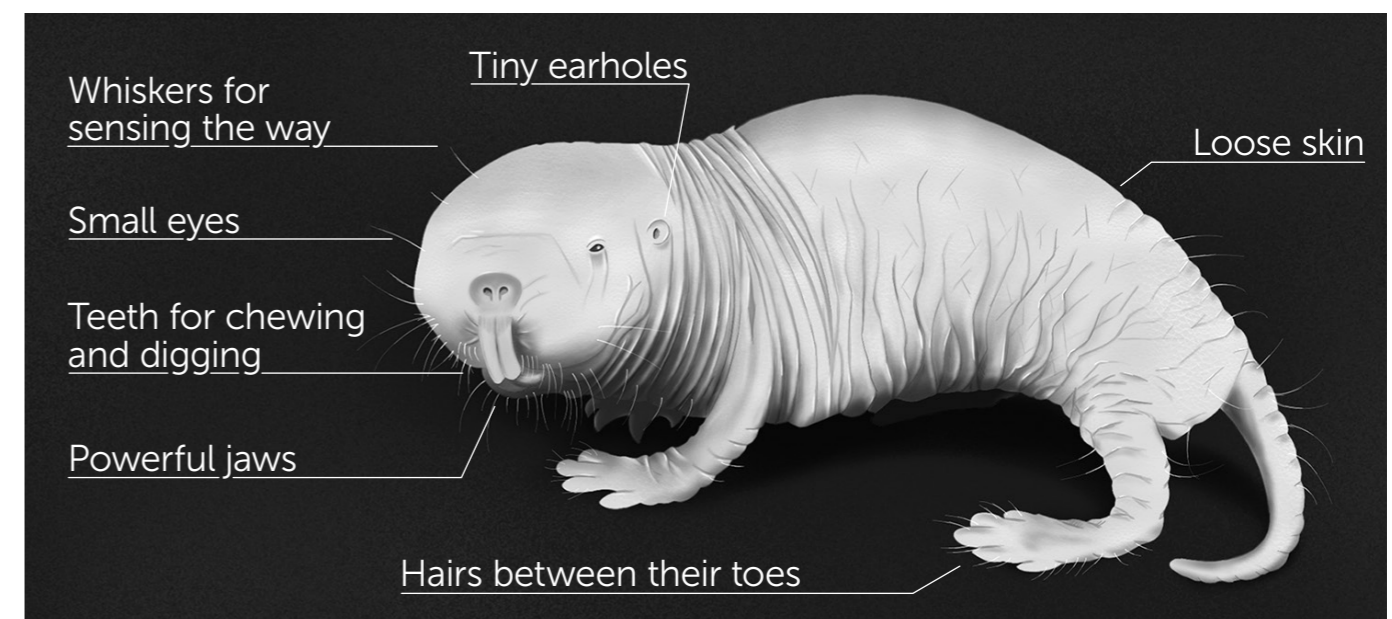
BEHAVIOUR

One unusual aspect of naked mole rat behaviour is that they live in colonies — in much the same way as bees and ants. The average colony has about 75 members (although there can be as many as 300) and is ruled by a queen.

Naked mole rats are experts at working cooperatively. Together, they dig tunnels, find food, help look after the pups, and groom and feed the queen.
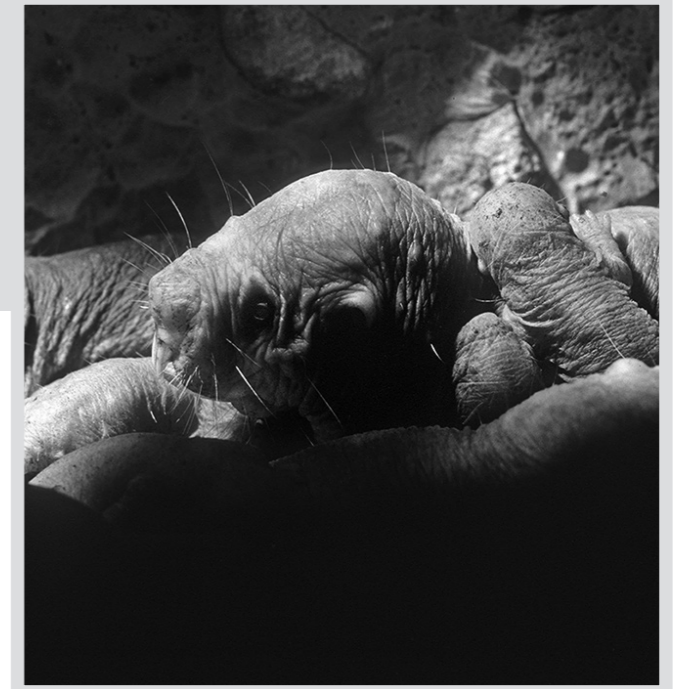
DON'T JUDGE A BOOK BY ITS COVER!

While the naked mole rat is not a cute animal, it is fascinating to study. Many aspects of its life are not what we would expect to see in a mammal. Scientists are interested in studying why these incredible creatures rarely get cancer, why they live so long, and why they show few signs of getting old. Perhaps we still have much to learn from these crinkly, funny looking little bundles!

Whiskers for sensing the way

Tiny earholes

Loose skin

Small eyes

Teeth for chewing and digging

Powerful jaws

Hairs between their toes

Name: _____   **Date:** _____

Naked Mole Rat

Questions

1. List 3 facts that you were amazed to learn about the naked mole rat.

   _____

   _____

   _____

   _____

2. The naked mole rat is a rodent. Name four other rodents.

   _____

   _____

3. Are naked mole rats herbivores or carnivores?

   _____

4. What features of this animal make it well suited to living underground?

   _____

   _____

   _____

5. Naked mole rats have one of the largest litter sizes of any mammal. Research the average number of offspring born at one time to each of the following mammals:

   • grizzly bear: _____

   • dog: _____

   • pig: _____

   • humpback whale: _____

Max's One-Man Band

Max let the wind slam the front door shut behind him as he carelessly dropped his schoolbag in the hallway. Like a flash of lightning, he shot up the stairs to his bedroom. It had been a disastrous day at school! Max only got three out of ten in his spelling test and had felt totally confused in maths. He had tripped and fallen flat on his face during sport. To make it worse, the caterpillar he had captured for his science investigation had escaped.

Max was a kid just like you. Every morning, he got out of bed, did all the things a schoolkid needs to do to get ready, and trudged to school. Max tried his best every day, but he was starting to think he was not good at anything. He wasn't a fast runner or a good speller. What's more, he found most subjects difficult or boring.

When people asked Max what he liked to do, he stared at the ground, searching for an answer. The only activities he really enjoyed were making things and making music. But what use was that?

Still, after his disastrous day, the first thing Max had done was race home to continue planning, designing and building his very own one-man band.

It had all started when Mrs McCreedy asked the class to design a musical instrument. Since then, Max had collected old instruments, wire, string and cardboard boxes. Finally, his creation was complete.

Max heaved the large bass drum (made from a cardboard box) onto his back. He adjusted the wires so that his harmonica was just below his mouth, and he picked up his guitar. Max was ready to take his one-man band for a test run. There was just one thing left to do...

"Mum, could you please help me attach these balloons?" he asked.

Max took his first step. The drum beater, connected to the foot pedal, beat the drum loudly! Max took a slow, deep breath. He blew softly into his harmonica. Next, he strummed his guitar. Before long, all parts of the one-man band were working together in perfect harmony.

Max's one-man band filled the streets with cheerful music. The neighbours whistled and clapped as he passed by. His bright balloons swayed in the breeze, and Max felt like a superhero.

The next day at school, all the kids had heard about Max's one-man band. Mrs McCreedy gave Max a certificate for being a curious and creative learner.

From that time on, when anyone asked Max what he enjoyed doing, he replied confidently, "I like making things and making music."

Max's One-Man Band

Literal Comprehension

1. At the beginning of the story, what did Max do when people asked what he liked to do?

2. What two things did Max discover he really enjoyed?

3. What three instruments are included in Max's one-man band?

Inferential Comprehension

4. Who is Mrs McCreedy? How do you know this?

5. Why do you think Max tied balloons on to his creation?

Evaluative Comprehension

6. The most exciting part of a narrative is called the 'climax'. What do you think is the climax of this narrative? Why do you think this?

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Max's One-Man Band (Answers)

Literal Comprehension

1. *He stared at the ground, searching for an answer.*

2. *The only activities he really enjoyed were making things and making music.*

3. Max's one-man band includes a drum, a harmonica and a guitar.

Inferential Comprehension

4. Mrs McCreedy is Max's teacher. You can guess this because she has the title 'Mrs', she addresses the class, and she gave Max a certificate.

5. Answers may vary, e.g. to gain attention, to look amazing, for fun, so they didn't fly away.

Evaluative Comprehension

6. The climax is when Max played his one-man band in front of everyone in the street. You can tell because of the language used to describe how happy he was.

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Recess Rules:
The More the Merrier

Literal Comprehension

1. What do Kat and Casper want to do at recess?

2. Why did Kat not want Aroha to play with her and Casper?

3. What silly phrase did Casper use right at the end of the story to show he was happy.

Inferential Comprehension

4. Why do you think Kat was worried about letting Aroha join their friend group?

5. Why do you think Kat thought having more than one best friend was ridiculous?

Evaluative Comprehension

6. What do you think would happen if Kat did not let Aroha play with them at recess? How do you think Aroha would feel?

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Recess Rules:
The More the Merrier (Answers)

Literal Comprehension

1. They want to play in the sandpit at recess.

2. Because she only liked playing with Casper as he was her best friend.

3. He used the phrase *Yippy dippy*.

Inferential Comprehension

4. Answers may vary, e.g. she was worried she would not have enough time with Casper, she wasn't sure she would get along with Aroha, she might feel jealous, she liked playing with Casper more.

5. Answers may vary, e.g. because the word 'best' implies that only one person can be that, because she wasn't good at sharing, because she didn't have any other friends to play with except Casper.

Evaluative Comprehension

6. Answers to this question will vary, e.g. Aroha would be sad and feel left out, Kat would miss out on making more friends.

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How to Build a WORM FARM

Why Use a Worm Farm?

Worm farming helps us to recycle our food scraps and to reduce the amount of waste we put in our bins. This reduces how much rubbish gets sent to landfill and, in turn, reduces the pollution that destroys our streams and oceans. Building a worm farm is also lots of fun!
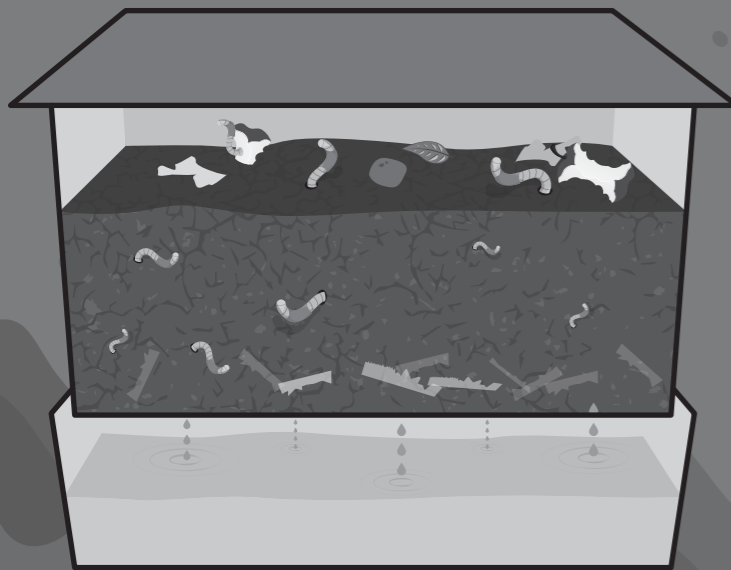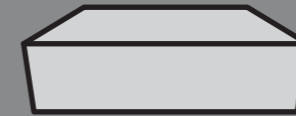
Materials

- Two boxes (one with a lid)
- Shredded paper
- Compost
- Compost worms
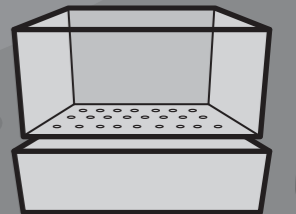- Watering can
- Water

Procedure

1 Gently place one of the boxes on the ground. Choose a shady location to prevent your worms from overheating.

2 Carefully poke some small holes in the base of the second box. Place this box on top of the first box.
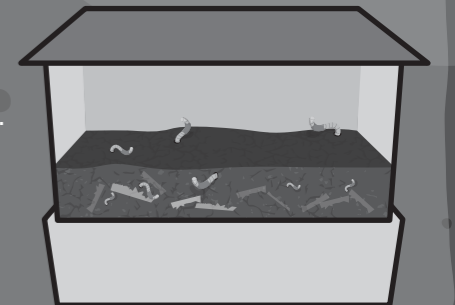
3 Mix the shredded paper with the compost. Generously spread this mixture over the base of the top box. Water the mixture until it is moist.
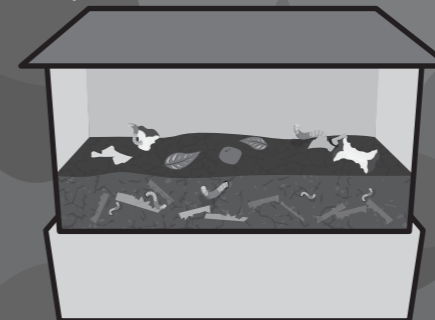
4 Delicately pour the worms over the top of the paper-and-compost mixture. Position the lid on the top box.
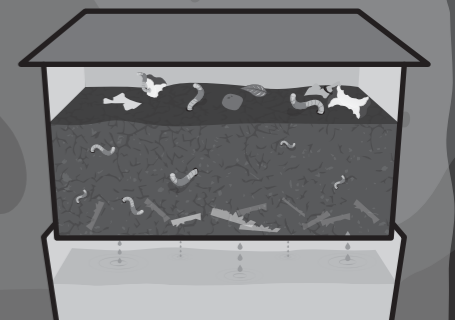
5 Once the worms are settled, feed them food scraps such as fruit and vegetable peels.

6 Every few weeks, collect the liquid in the bottom box. Add some water, and then pour the liquid onto your plants.

How to Build a Worm Farm

Literal Comprehension
1. What items do you need to build a worm farm?
2. What sort of location should you choose for your worm farm?
3. What can you put in the worm farm to feed the worms?

Inferential Comprehension
4. Where do you think you could get compost worms from?
5. Why do you think it is important to *delicately* pour the worms into the worm farm?
6. Why do you think step 6 tells you to *pour the liquid onto your plants*?

Evaluative Comprehension
7. Why do you think worms are important for a healthy environment? What would happen if there were no worms?

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How to Build a Worm Farm (Answers)

Literal Comprehension
1. *Two boxes, shredded paper, compost, compost worms, a watering can, water.*
2. *Choose a shady location to prevent your worms from overheating.*
3. *Food scraps such as fruit and vegetable peels.*

Inferential Comprehension
4. Answers may vary, e.g. hardware store, garden store, existing garden.
5. It is important because they are living creatures that need to be treated gently.
6. Answers may vary, e.g. because the water contains lots of good nutrients that help plants grow, because plants need lots of water, to stop the worm farm getting too wet/boggy.

Evaluative Comprehension
7. Answers may vary, e.g. because worms break down items and turn them into soil, because soil is good for gardens and growing plants we need. Some things would not rot or break down as quickly without worms.

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To the Editor

Dear Editor,

I want to express my concerns about my town's plan to replace a local park with a shopping centre. In my opinion, this is a serious mistake. The town should consider that children enjoy exploring the park, many species of wildlife live there, and the park brings the community together. Protect the park!

Firstly, children need safe places to explore. Some children aren't lucky enough to have their own backyard, so removing the park would mean they have nowhere outdoors to play. The large open spaces in the park are perfect for playing sports with friends, which is a fun way to exercise.

Secondly, the park is home to many animals. Imagine going for a walk and not hearing any birds chirping in the trees up above. If the park is demolished, the birds won't have anywhere to nest, as all the large trees will be cut down. How would you feel if your house was destroyed and you could do nothing about it?

Finally, community activities are held in the park. Charities use the park to hold fundraisers and events for good causes. The removal of this space would make it extremely difficult for local organisations to raise money for those in need. Fun runs and movies under the stars will not be possible if the park is turned into a block of buildings.

Our town will suffer a terrible loss if the decision to replace the park goes ahead. Children need a safe place to play, animals need an area to call home, and the community needs a space to hold events. Our park needs as much help as it can get. Protect our park!

Kind regards,

Jesse Thompson

Letter to the Editor

Literal Comprehension

1. What does the author say the *large, open spaces* in the park are *perfect for*?

2. What are the three main reasons the author gives for keeping the park?

3. In the last paragraph, what does the author say will happen *if the decision to replace the park goes ahead*?

Inferential Comprehension

4. What types of animals (or species) do you think would suffer the most if the park is lost?

5. The author asks, *"How would you feel if your house was destroyed and you could do nothing about it?"* How do you think the author expects you might feel?

Evaluative Comprehension

6. Draw up a table with two columns that shows which of the author's points you agree with and which you disagree with?

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Letter to the Editor (Answers)

Literal Comprehension

1. *The large open spaces in the park are perfect for playing sports with friends, which is a fun way to exercise.*

2. *Children enjoy exploring the park, many species of wildlife live there, and the park brings the community together.*

3. *Our town will suffer a terrible loss if the decision to replace the park goes ahead.*

Inferential Comprehension

4. Answers will vary, but may include native birds and mammals, domestic pets that people bring to the park, or even human beings.

5. Answers will vary, e.g. the author expects that you will feel upset, angry, hurt, lost or homeless.

Evaluative Comprehension

6. Answers to this question will vary.

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Name: _____   **Date:** _____

Fix It Up – Basic Punctuation

The following sentences need corrections. Make edits and then rewrite the text.

1.

| the swimmer nervously stepped up to the starting position he checked his swimming cap adjusted his goggles and took three deep breaths | **5 Errors** |

_____

_____

2.

| we went to the eiffel tower when we were in paris it was very tall and had great views from the top it took over two years to build. | **8 Errors** |

_____

_____

3.

| emperor penguins live in antarctica they keep each other warm by bunching together in a huddle to shield themselves from the cold wind | **5 Errors** |

_____

_____

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Name: _____   **Date:** _____

Contraction Word Search

I	W	A	G	H	E	'	S	V	I	S	N	'	T	S
'	A	S	W	R	L	I	'	S	O	W	C	I	H	H
M	T	D	'	E	Y	H	D	U	'	H	H	H	E	J
U	Y	U	W	H	R	D	G	W	M	O	V	Y	Y	T
E	O	S	R	E	'	E	T	O	I	'	N	I	'	K
Y	S	D	M	T	O	W	N	B	G	S	I	P	R	D
I	W	S	A	W	F	Q	K	'	H	H	'	E	E	'
H	S	H	O	U	L	D	N	'	T	E	T	T	T	W
A	T	E	E	R	B	I	W	O	N	G	H	'	U	O
S	A	'	L	R	L	A	I	T	'	S	N	N	T	H
N	Z	L	H	J	E	D	E	N	T	A	H	E	D	P
'	W	L	'	X	T	'	N	M	C	N	O	R	'	N
T	P	U	Y	B	M	E	S	S	G	C	L	A	S	A
M	U	S	T	'	V	E	W	A	W	A	S	N	'	T

SHOULD NOT	THEY ARE	SHE WILL	WHY DID	HAS NOT
MIGHT NOT	WERE NOT	WAS NOT	IS NOT	IT IS
WHERE IS	THAT HAD	ARE NOT	WHO IS	HE IS
MUST HAVE	YOU ARE	CANNOT	HOW DID	I AM

Name: _____ **Date:** _____

Contraction Codes

Words that can be made into contractions are hidden in the grid below. Carefully cut out the decoder to help you find the words.

T	S	I	■	U	B	H	W	E	I	W	K
S	A	N	N	O	C	M	G	O	L	U	D
I	E	S	I	■	F	S	X	N	L	K	O
V	C	W	R	T	H	T	A	W	■	B	N
H	H	O	A	E	R	A	E	U	■	N	T
H	E	V	■	M	W	B	K	O	J	Y	Z
W	S	H	D	W	L	D	■	L	R	V	E

1. Using the decoder, line up the first cut-out with a dotted square.

2. In order, note down the three letters in the spaces.

3. Rotate the decoder clockwise 90 degrees.

4. Continue until you uncover a black space.

5. Write the contraction for the words you uncovered.

Contractions

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

3.→

2. ↑

1. ↑

Decoder

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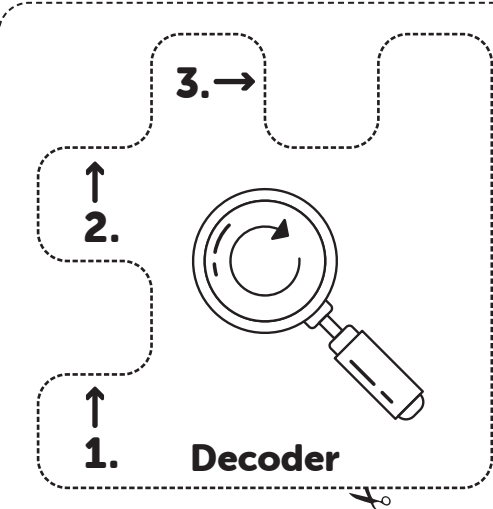
Name: _____ Date: _____

Punctuation Maze – The Terrifying Town

Solve the maze and tally up how many punctuation marks your path took you past. Then write a passage about the stated topic, using all the punctuation marks you collected.

Topic: The Terrifying Town

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

ABC	.	,	?	!

Name: _____   **Date:** _____

How to Make Pancakes: Article Edition

Read over the following procedure text about how to make pancakes. Fill in the gaps with the appropriate article that helps the text make more sense.

HOW TO MAKE
Pancakes

Ingredients

1 cup of self-raising flour

1 tablespoon of sugar

1 egg, lightly beaten

¾ cup of milk

50 g butter, melted

Equipment

Mixing bowl

Wooden spoon

Sifter

Whisk
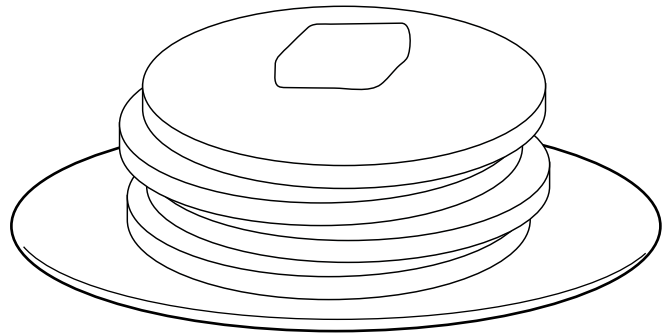
Method

1. Wash your hands with soap and then gather all _____ ingredients.

2. Whisk _____ flour and sugar in _____ mixing bowl.

3. Mix in _____ egg.

4. Mix in _____ milk _____ little at _____ time until _____ batter is smooth and lump free.

5. Put _____ pan on medium heat.

6. Brush butter over _____ cooking surface.

7. Pour ¼ of _____ cup of _____ pancake mixture into _____ middle of _____ pan.

8. Flip _____ pancake over when large bubbles form on _____ surface.

9. Cook until lightly golden on _____ other side.

10. Repeat steps 7–10 until all of _____ pancake mixture has gone.

Fact File - Eagles

Classification

- birds
- more than 60 different species
- lifespan of 20-25 years

Size and Appearance

- brown and white feathers
- large wingspan of around 2 m (6.5 ft)
- sharp beak and talons

Habitat and Lifestyle

- found worldwide, except New Zealand and Antarctica
- live in mature trees in wetland areas
- solitary birds

Diet and Eating Habits

- carnivores – eat fish, smaller birds and rodents
- crush prey with their sharp talons
- need 500 g (1 lb) of food per day

Name _____   **Date** _____

Writing Sentences From Dot Points – Animals

Turn each dot point from the fact file into a full sentence.

Classification

1. _____

2. _____

3. _____

Size and Appearance

1. _____

2. _____

3. _____

Habitat and Lifestyle

1. _____

2. _____

3. _____

Diet and Eating Habits

1. _____

2. _____

3. _____

Name: _____   **Date:** _____

Informative Text – Scaffold

Introduction (This is a general statement about the subject of the text).

_____

_____

_____

_____

Paragraph 1 (Describe one detail about the subject of the text).

_____

_____

_____

_____

_____

_____

_____

_____

Paragraph 2 (Describe one detail about the subject of the text).

_____

_____

_____

_____

_____
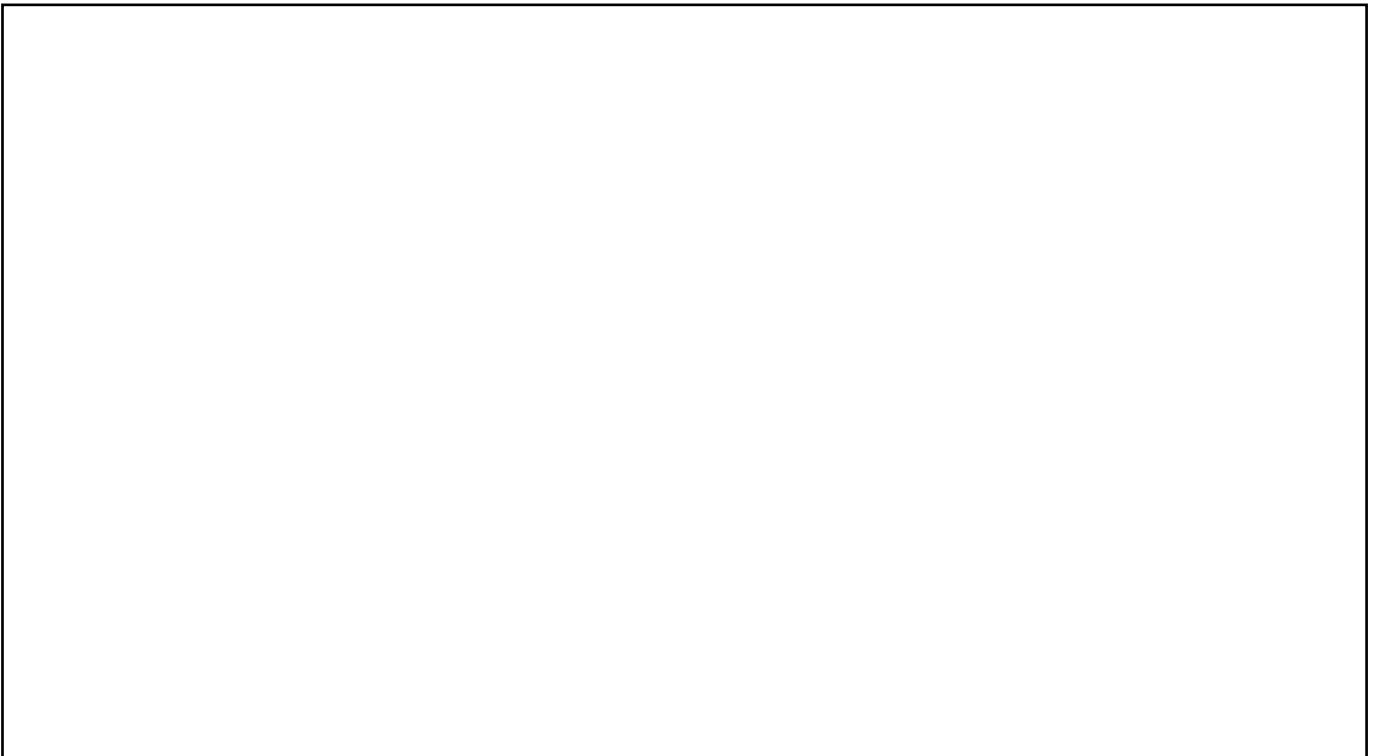
Name: _____   **Date:** _____

Paragraph 3 (Describe one detail about the subject of the text).

_____

_____

_____

_____

_____

_____

_____

Conclusion (This is a concluding statement about the subject of the text).

_____

_____

_____

_____

Illustration

How to Make...

Today you are going to write a procedure.

The topic you have been given for your procedure is "How to Make...".

Think:

What are you going to explain how to make?

Think of something you know how to make well. This could be a food item, a drink, something made out of craft, a computer program or an app.

Plan:

Plan your writing before you begin. Remember to include:

- the goal
- the ingredients/materials/equipment
- the steps.

Remember to check:

- Use verbs, nouns, adjectives, adverbs and time sequence words.
- Check your spelling and punctuation carefully.
- Make sure your writing makes sense.

Name _____ **Date** _____

Procedure Text Writing Scaffold

Title: _____

Goal: _____

Materials/Equipment/Ingredients

```
[                                                              ]
[                                                              ]
[                                                              ]
[                                                              ]
[                                                              ]
```

Method

Step 1: _____

_____

_____

Step 2: _____

_____

_____

Step 3: _____

_____

_____

Step 4: _____

_____

_____

Step 5: _____

_____

_____

Name:

Date:

Name:

Date:

1)	$2 \times 1 =$	
2)	$7 \times 2 =$	
3)	$4 \times 3 =$	
4)	$5 \times 1 =$	
5)	$3 \times 5 =$	
6)	$2 \times 3 =$	
7)	$1 \times 1 =$	
8)	$3 \times 2 =$	
9)	$5 \times 10 =$	
10)	$6 \times 5 =$	
11)	$3 \times 3 =$	
12)	$4 \times 5 =$	
13)	$12 \times 3 =$	
14)	$6 \times 1 =$	
15)	$7 \times 3 =$	
16)	$1 \times 5 =$	
17)	$12 \times 2 =$	
18)	$11 \times 5 =$	
19)	$2 \times 2 =$	
20)	$9 \times 2 =$	

1)	$10 \times 10 =$	
2)	$9 \times 10 =$	
3)	$4 \times 1 =$	
4)	$9 \times 2 =$	
5)	$1 \times 2 =$	
6)	$4 \times 5 =$	
7)	$2 \times 3 =$	
8)	$10 \times 2 =$	
9)	$9 \times 1 =$	
10)	$12 \times 3 =$	
11)	$6 \times 2 =$	
12)	$4 \times 3 =$	
13)	$5 \times 1 =$	
14)	$7 \times 1 =$	
15)	$7 \times 10 =$	
16)	$0 \times 3 =$	
17)	$11 \times 1 =$	
18)	$2 \times 5 =$	
19)	$5 \times 2 =$	
20)	$10 \times 5 =$	

Time: Score:

Time: Score:

Name:

Date:

1) $0 \times 1 =$ _____

2) $10 \times 2 =$ _____

3) $6 \times 5 =$ _____

4) $9 \times 5 =$ _____

5) $8 \times 3 =$ _____

6) $1 \times 2 =$ _____

7) $2 \times 10 =$ _____

8) $10 \times 1 =$ _____

9) $9 \times 3 =$ _____

10) $4 \times 1 =$ _____

11) $10 \times 10 =$ _____

12) $7 \times 5 =$ _____

13) $9 \times 2 =$ _____

14) $9 \times 10 =$ _____

15) $10 \times 3 =$ _____

16) $0 \times 5 =$ _____

17) $6 \times 3 =$ _____

18) $12 \times 1 =$ _____

19) $4 \times 3 =$ _____

20) $8 \times 2 =$ _____

Time: | Score:

Name:

Date:

1) $9 \times 10 =$ _____

2) $10 \times 1 =$ _____

3) $10 \times 3 =$ _____

4) $6 \times 2 =$ _____

5) $1 \times 3 =$ _____

6) $6 \times 1 =$ _____

7) $1 \times 1 =$ _____

8) $8 \times 1 =$ _____

9) $4 \times 5 =$ _____

10) $4 \times 1 =$ _____

11) $3 \times 1 =$ _____

12) $11 \times 10 =$ _____

13) $6 \times 5 =$ _____

14) $2 \times 10 =$ _____

15) $11 \times 2 =$ _____

16) $5 \times 10 =$ _____

17) $6 \times 3 =$ _____

18) $9 \times 2 =$ _____

19) $0 \times 1 =$ _____

20) $6 \times 10 =$ _____

Time: | Score:

teachstarter

Maths Mentals - Questions

Day 1

1. 55 - 6 = _____

2. 19 + 2 = _____

3. 90 + 89 = _____

4. 92 ÷ 2 = _____

5. 98 ÷ 2 = _____

6. Write the number showing 1 tens and 4 ones. _____

7. Complete this counting pattern:
83, 86, 89, 92, _____, _____, _____

8. What is the sum of 50 and 73? _____

9. Share 26 pieces of watermelon between 2 children. _____

10. 50 cents + 10 cents + $1.00 = _____

11. Colour in a third of these stars.

12. Colour in an eighth of these triangles.

13. 1 day = _____ hours

14. What is the name of this 3D object? _____
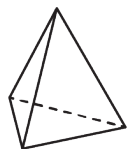
15. Which circle has the lowest chance of being selected? Black or white? _____
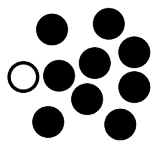
Day 2

1. 59 - 2 = _____

2. 23 + 98 = _____

3. 97 + 53 = _____

4. 40 ÷ 2 = _____

5. 15 ÷ 3 = _____

6. 545 = _____ hundreds, _____ tens, _____ ones.

7. Complete this counting pattern:
64, 66, 68, 70, _____, _____, _____

8. Add 64 and 22 together: _____

9. Share 10 bananas between 10 children. _____

10. 50 cents + $2.00 + 20 cents = _____

11. Colour in a third of these stars.

12. Colour in an eighth of these circles.
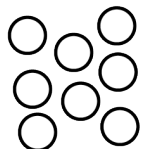
13. What digital time does the clock show? _____

14. How many faces does a rectangular prism have? _____
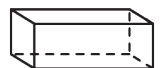
15. Which circle has the lowest chance of being selected? Black or white? _____

Day 4

1. 48 + 77 = _____

2. 58 - 5 = _____

3. 69 + 41 = _____

4. 56 ÷ 2 = _____

5. 80 ÷ 2 = _____

6. 889 = _____ hundreds, _____ tens, _____ ones.

7. Complete this counting pattern:
41, 44, 47, 50, _____, _____, _____

8. Take 32 away from 59: _____

9. Share $80 between 10 children. _____

10. 5 cents + $1.00 + 50 cents = _____

11. Colour in a third of these circles.
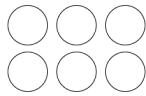
12. Colour in a quarter of this shape:
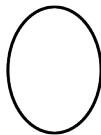
13. How many days in a week? _____

14. A square-based pyramid has _____ corners.
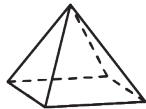
15. Which star has the highest chance of being selected? Black or white? _____

Day 5

1. 51 + 15 = _____

2. 23 - 5 = _____

3. 89 - 7 = _____

4. 20 ÷ 10 = _____

5. 84 ÷ 2 = _____

6. Write the numeral for six thousand, nine hundred and ninety-two: _____

7. Complete this counting pattern:
100, 105, 110, 115, _____, _____, _____

8. Take 18 away from 73: _____

9. Share $90 between 2 children. _____

10. 20 cents + $2.00 + 5 cents = _____

11. Colour in a quarter of these stars.

12. Colour in an eighth of these triangles.
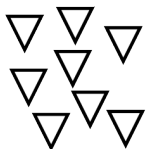
13. What digital time does the clock show? _____

14. What is the name of this 3D object? _____
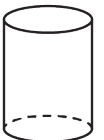
15. Which star has the highest chance of being selected? Black or white? _____

PROBLEM SOLVING
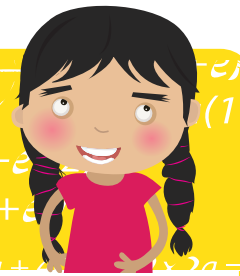
Molly is moving around the furniture in her bedroom.

The bed must be placed under the window, but away from the door.

The desk must be against the wall, but away from the window.

The lamp must be next to the desk, but away from the bed.

Draw a plan of what Molly's bedroom could look like.

PROBLEM SOLVING

Katie's class are going on a school outing. There are 32 students in her class.

The students must be placed in small groups during the outing.

There must be no less than 2 and no more than 12 students in each group.

How many groups could there be? How many students would be in each group?

List some possibilities.

PROBLEM SOLVING

Mei is playing a lucky numbers game. She must pick three numbers out of a bag.

The numbers in the bag are: 12, 8, 15, 2, 11 and 9.

Mei will win a prize if the three numbers add up to a number less than 20; if the three numbers add up to a multiple of five; or if the three numbers add up to a number greater than 30.

List some winning combinations of numbers.

PROBLEM SOLVING

Pedro's grandmother has made 32 cookies for Pedro to share equally with some friends.

How many friends could Pedro share his cookies with?

How many cookies would each friend receive?

List some possibilities.

Make sure every friend receives the same number of cookies.

PROBLEM SOLVING 123

Choose four different digits between 1 and 9.

How many possible numbers can you make using these digits?

Write your numbers in ascending and descending order.

What is the difference between the largest and smallest numbers?

Write a word problem involving some of your numbers.

PROBLEM SOLVING

Dan has some 2-D shapes. He wants to use them to draw a creative picture.

Dan has 2 circles, 4 rectangles, 2 triangles and 1 square.

Sometimes, Dan uses all of the 2-D shapes in his drawing.

Other times, he chooses only some of the shapes to use.

Draw some creative pictures using Dan's shapes.

PROBLEM SOLVING
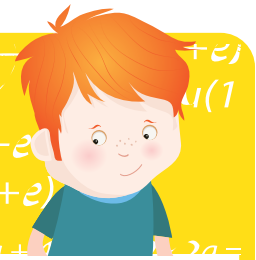
Henry is at the toy store. He has $10 to spend on a gift for his little brother.

Toy trains cost $5.00. Balls cost $2.50. Building blocks cost $4.50.

List some different gift combinations that Henry could buy.

Calculate the total amount Henry would pay for each combination, as well as any change he might receive.

PROBLEM SOLVING
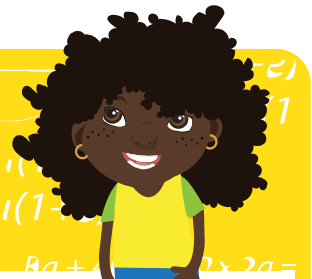
Alexia is having a dinner party. She has invited 24 friends.

Alexia must organise the tables and chairs.

There must be no less than 2 people and no more than 6 people at each table.

Draw some possible table plans for Alexia's dinner party.

There does not need to be the same number of people at each table.

MONEY MATTERS

Find a shopping receipt or catalogue at home.

- Pick 3 items you would like and work out how much it would cost to buy them all.

- Find 3 items you could buy for $10.00.

- What are the cheapest and most expensive items?
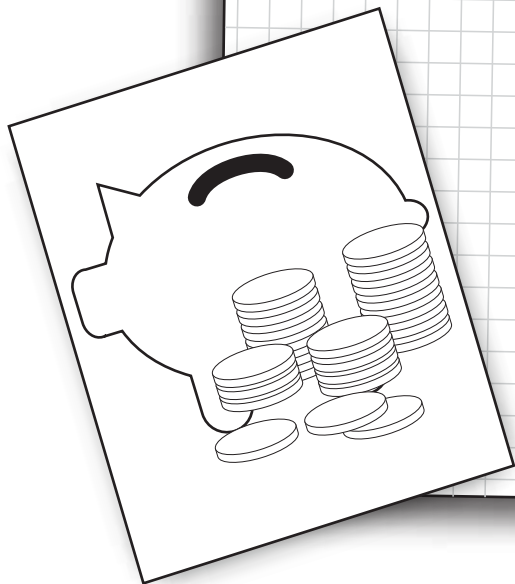
MONEY MATTERS

Pick 3 items you would like and work out how much it would cost to buy them all.

Item 1 ....

Item 2 ....

Item 3 ....
_____

Total ....

Find 3 items you could buy for $10.00.

Item 1 ....

Item 2 ....

Item 3 ....
_____

Total ....

Draw the cheapest item.

$ ....
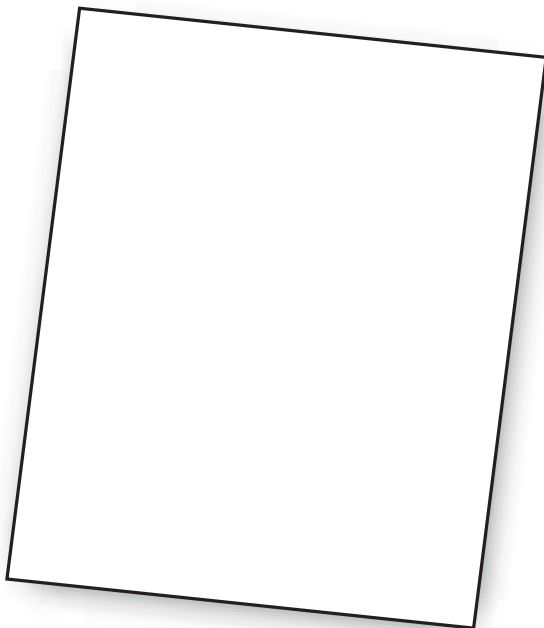
Draw the most expensive item.

$ ....

Coordinates Drawing

10
9
8
7
6
5
4
3
2
1
0

A   B   C   D   E   F   G   H   I   J   K
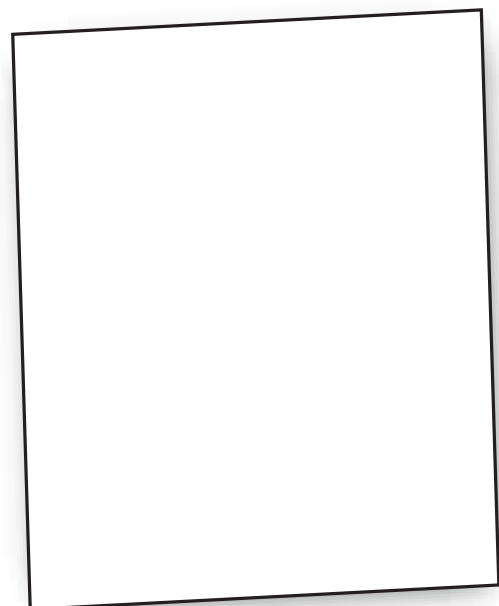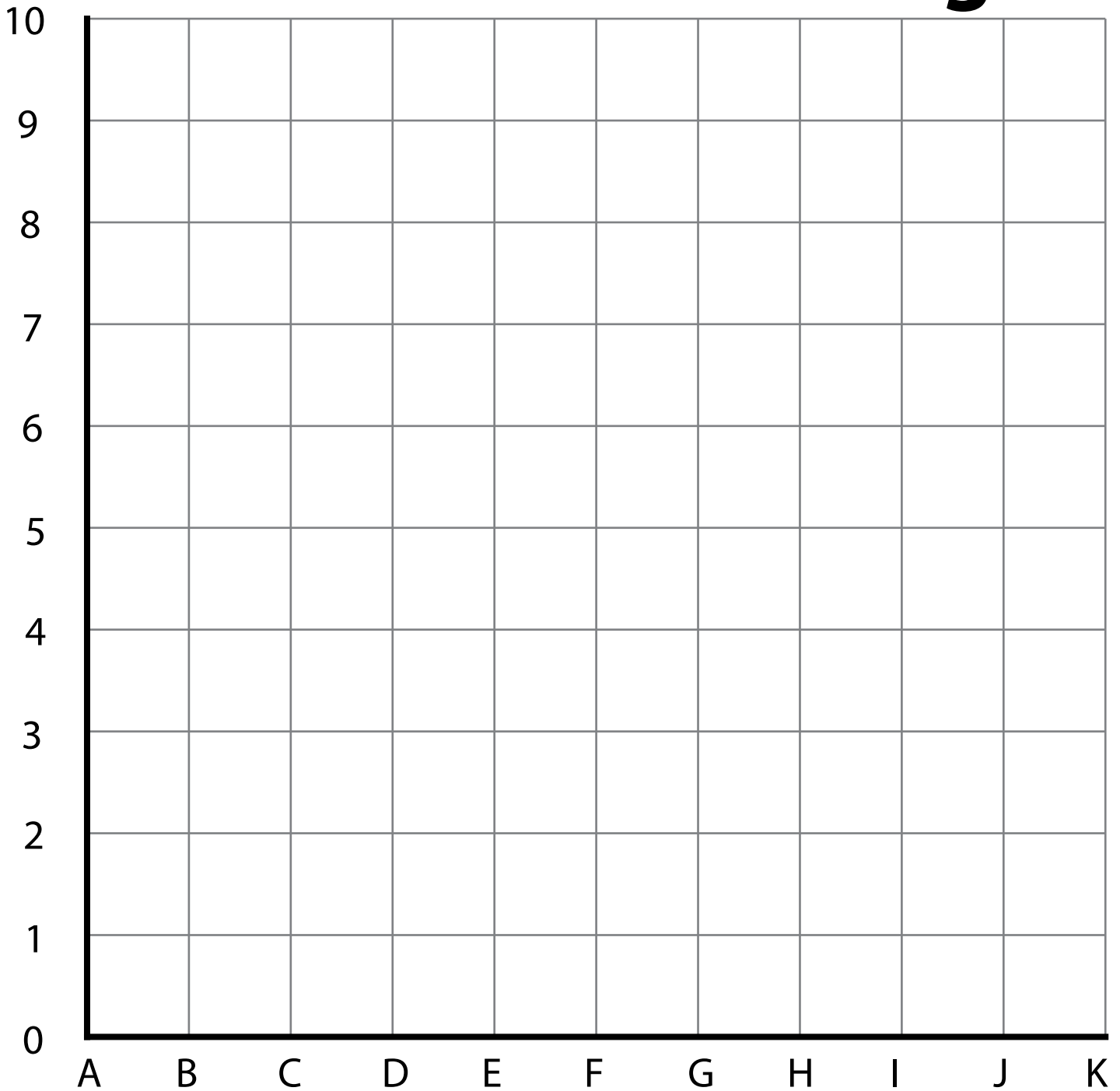
Use a ruler to draw a line between each of the following coordinates. Cross them off as you go.

A1 to K1.

C1 to C5, C5 to I5, I5 to I1.

F1 to F4, F4 to H4, H4 to H1.

D3 to D2, D2 to E2, E2 to E3, E3 to D3, D3 to D4, D4 to E4, E4 to E3.

B5 to J5, J5 to F7, F7 to B5.

C7 to D7, D7 to D6, C7 to half-way between C5 and C6.

Draw a circle with a diameter between H8 and J8.

Draw some smoke coming out of the chimney.

Draw a flower to the right of the house.

Colour in your drawing!

Name: _____   Date: _____
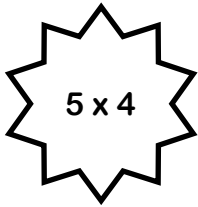
3 x Colour Fun!

Find the answer to the multiplication number sentence and then colour that section the corresponding colour.

7 x 3

10 x 3

11 x 3

6 x 3

3 x 1
3 x 1
3 x 3
3 x 4
3 x 3
4 x 3

8 x 3
3 x 1
3 x 5
3 x 3
3 x 4
3 x 5
3 x 6
3 x 8
3 x 7
5 x 3
3 x 2

3 x 11
3 x 5
3 x 1
3 x 1
5 x 3
3 x 1
3 x 10

4 x 3
3 x 9
3 x 1
3 x 12

|		
3 white	15 yellow	27 pink
6 black	18 dark green	30 light blue
9 red	21 dark blue	33 light green
12 orange	24 purple	36 brown

5 x 4

5 x Colour Fun!

5 x 3

Find the answer to the multiplication number sentence and then colour that section the corresponding colour.

5 x 10

10 x 5

5 x 9   5 x 8

5 x 11

5 x 6

1 x 5

5 x 7

5 x 12

5 x 1   1 x 5   5 x 1

5 x 2

5 x 9

5 x 5   5 x 11   5 x 6

5 x 1   1 x 5

7 x 5

5 x 9

1 x 5   5 x 1

5 x 10

5 x 3 5 x 4 5 x 5

5 x 2

5 x 7

5 x 8   5 x 9   3 x 5   4 x 5   5 x 5

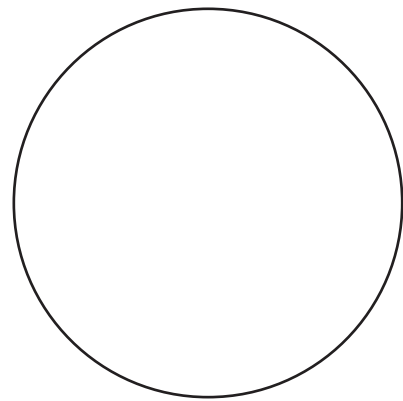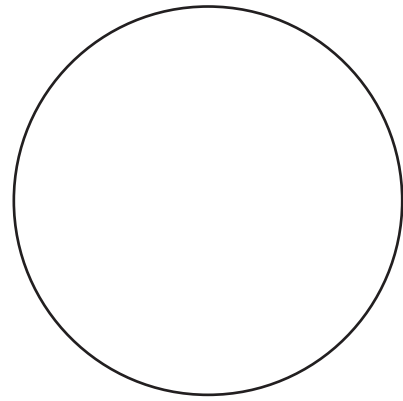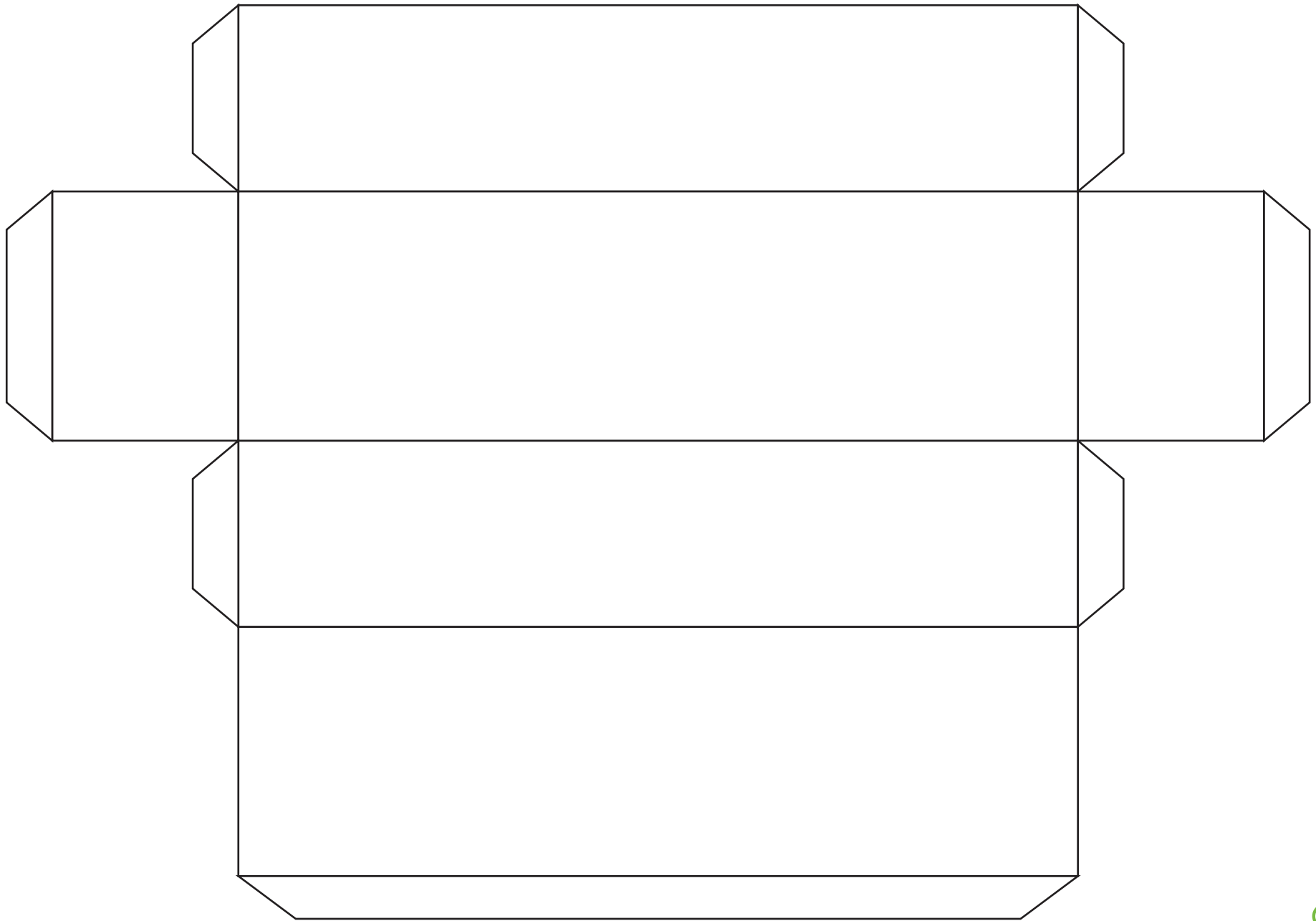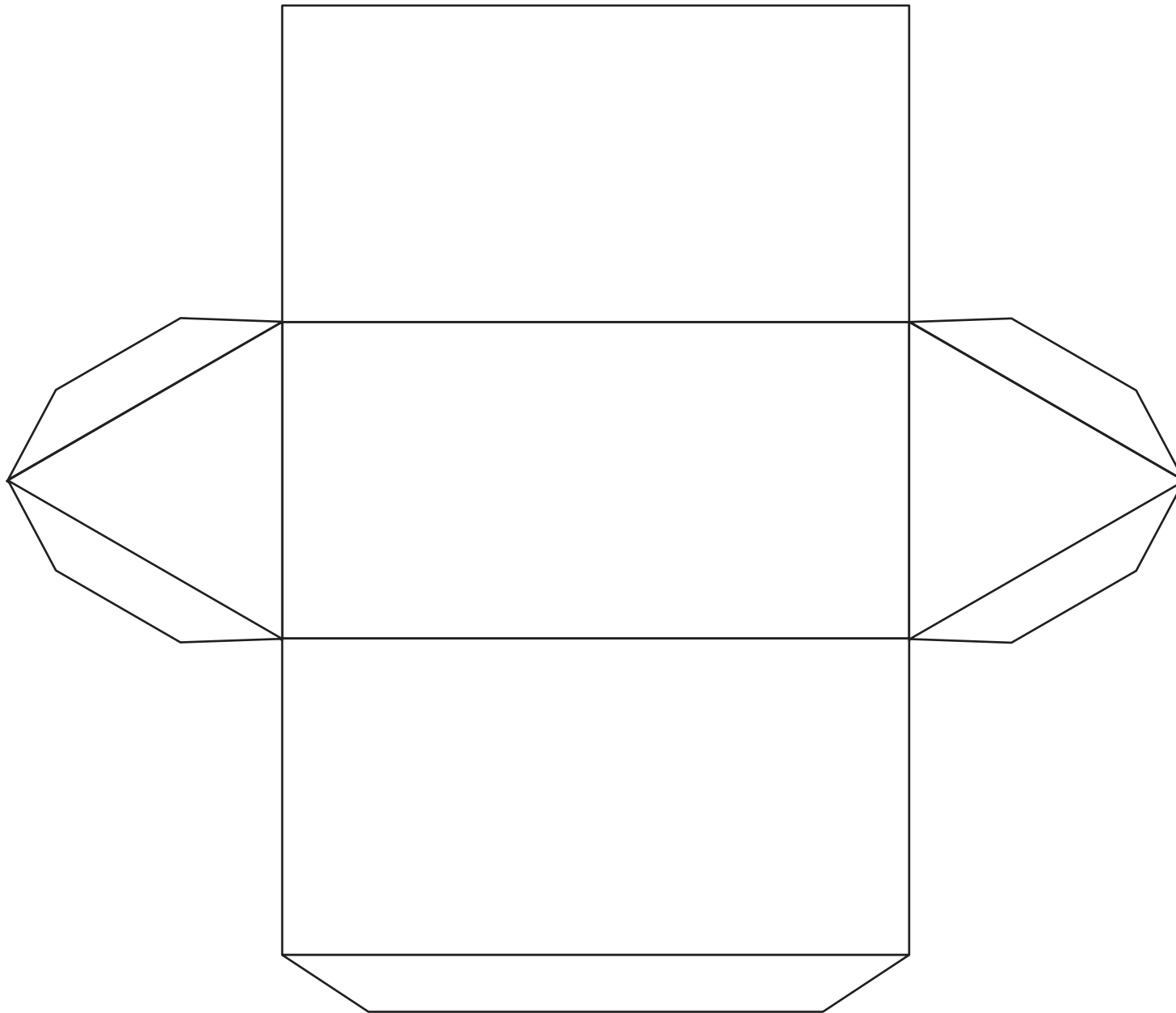|		
5 white	**25** yellow	**45** pink
10 black	**30** dark green	**50** light blue
15 red	**35** dark blue	**55** light green
20 orange	**40** purple	**60** grey

11 x 5

6 x 5

teachstarter
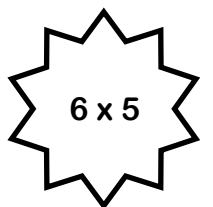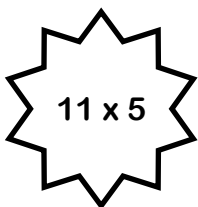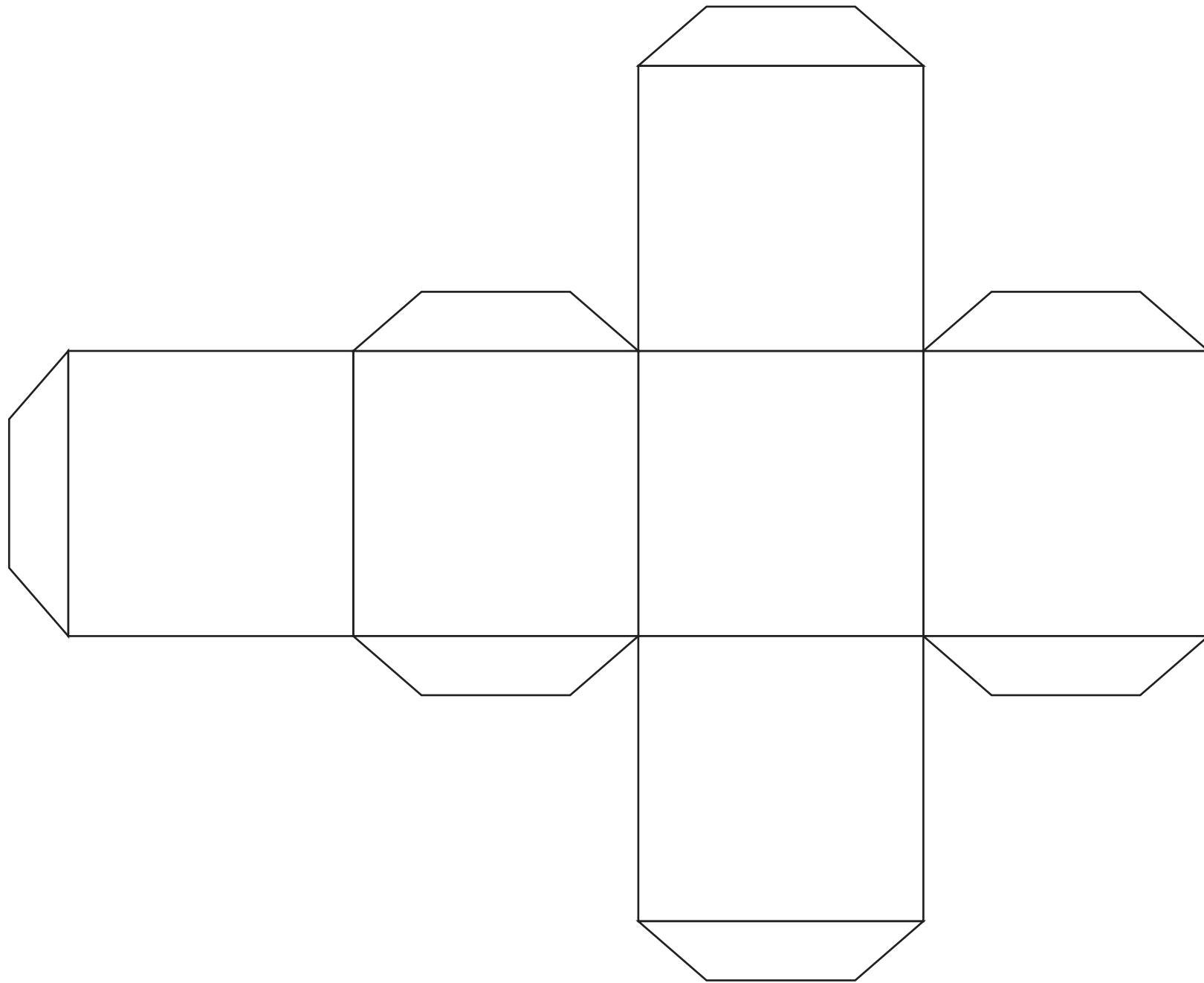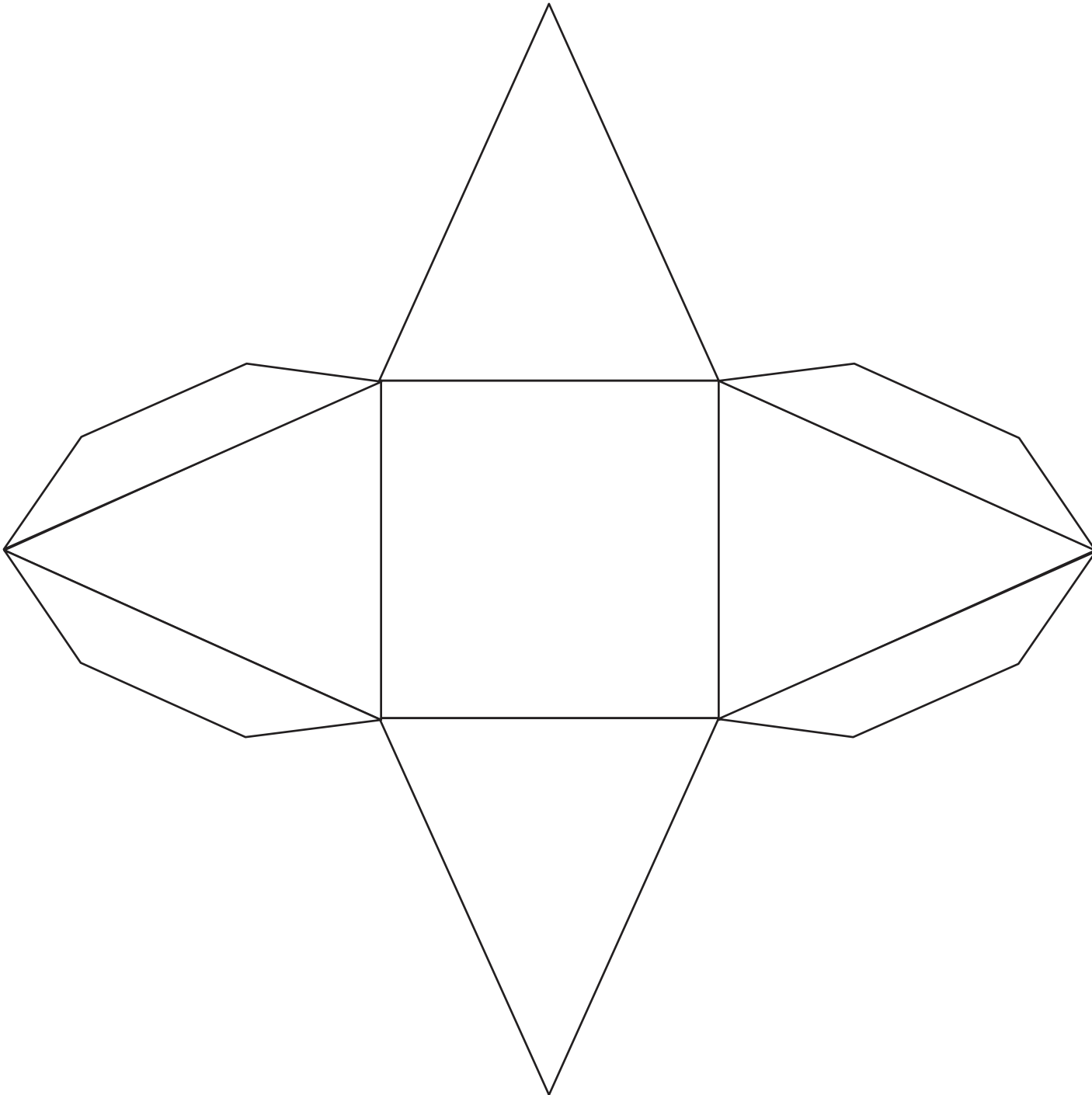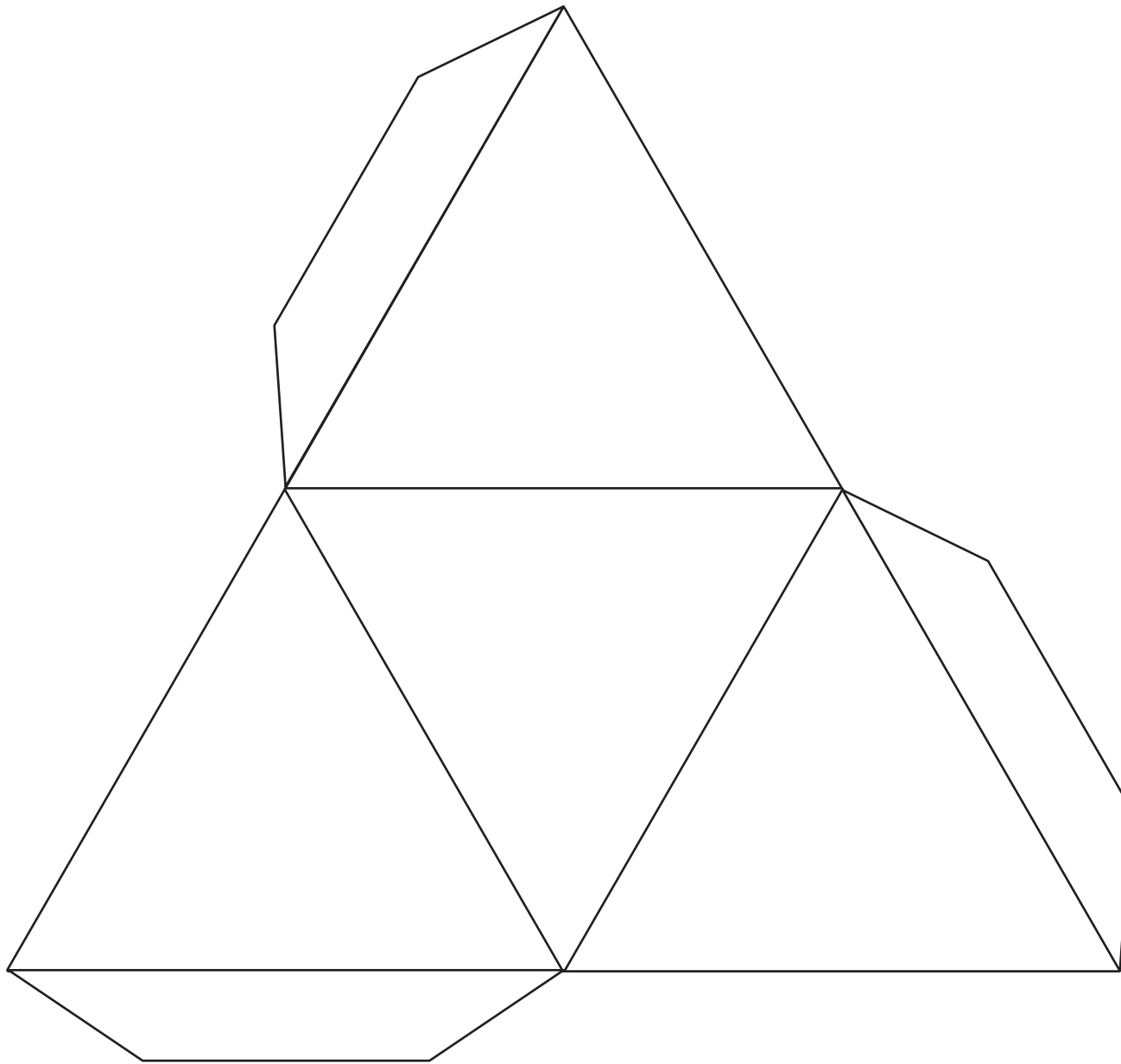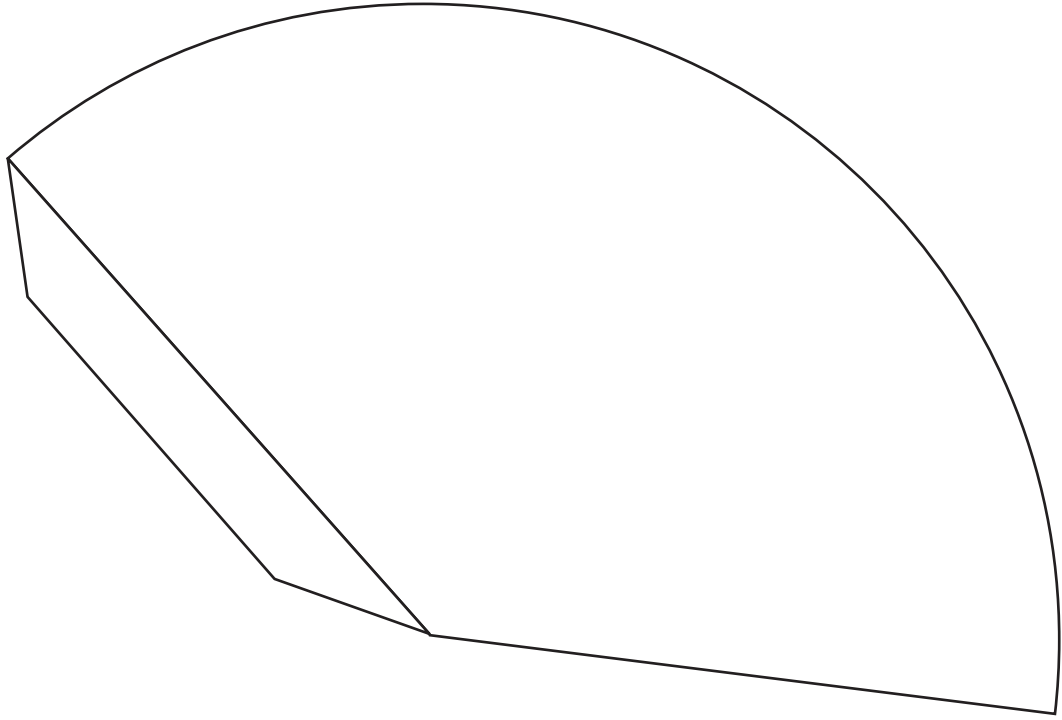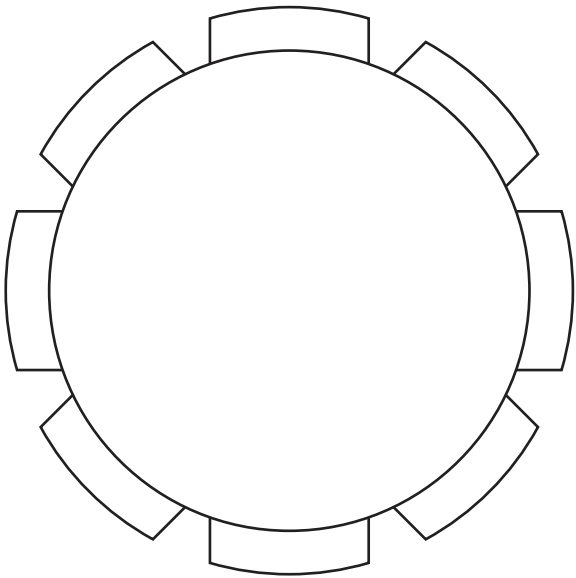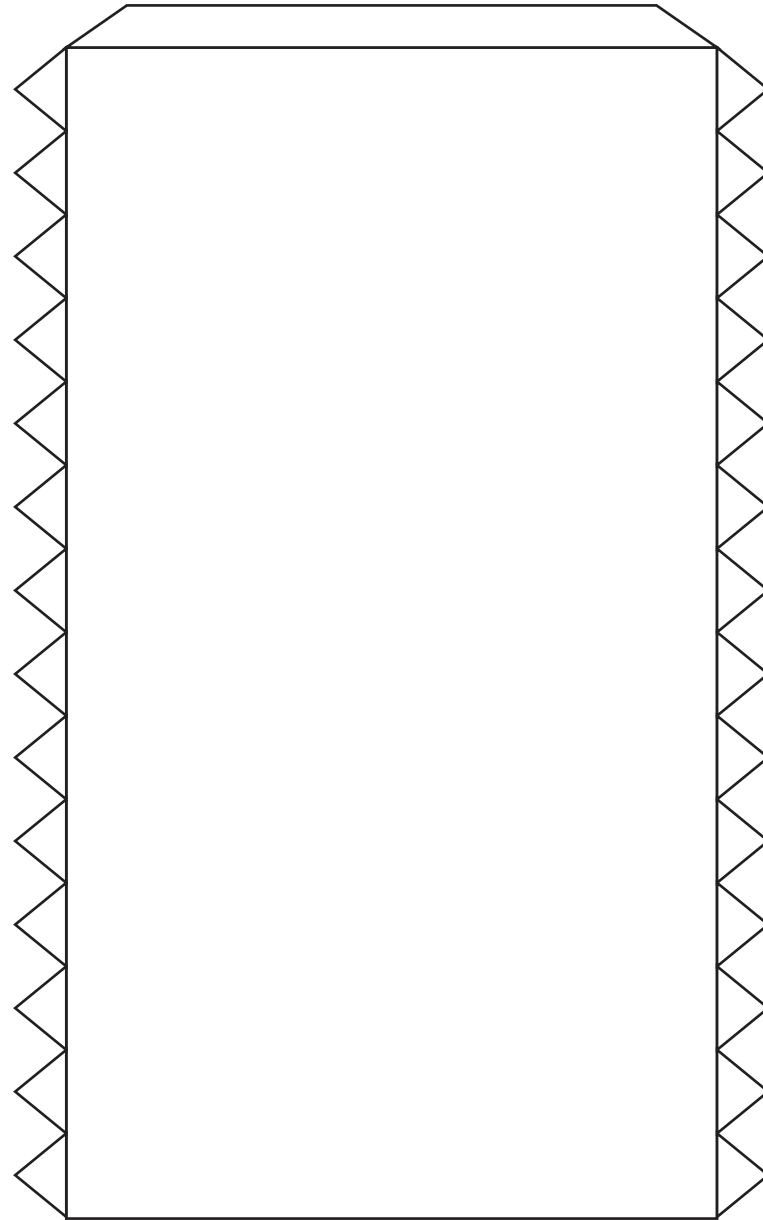
Keeping Out the Heat

LOOKING AT THE WORLD

Heat passes through some materials easily. These materials are called 'thermal conductors'. Heat does not pass through other materials as easily. These materials are called 'thermal insulators'. Thermal insulators are good at keeping hot things hot and cold things cold.
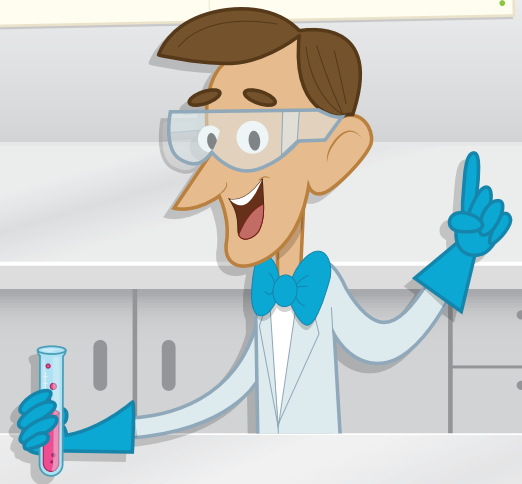
AIM

To investigate whether bubble wrap, paper towel or tin foil is the best thermal insulator.

SCIENTIST'S NOTE

Transfer the ice cubes directly from the freezer into the sealable bags when you are ready to start the experiment (to avoid any unintended melting).

Method

1. Cover one sealable plastic bag with bubble wrap, one with paper towel and one with tin foil. Make sure you are still able to open and close the bag.

2. Place one ice cube inside each plastic bag, then seal each bag thoroughly. Place the three plastic bags next to each other in a warm area of the classroom. Leave the bags for 30 minutes.

3. Once the time has elapsed, collect the plastic bags. Pour any water that has collected in each bag into three separate medicine cups. Record the amounts of water in the results table.

Equipment

3 x ice cubes

3 x snack-size sealable plastic bags

3 x small measuring cylinders (medicine cups or similar)

Bubble wrap (cut to size)

Paper towel (cut to size)

Tin foil (cut to size)

Name _____ **Date** _____

Keeping Out the Heat

Hypothesis: (What do you think will happen in the experiment?)

I think the _____ will be the best insulator of heat.

I think this because _____

_____ .

Variables: (Which variables will stay the same, which should be changed and which will be measured?)

Constants (What will I keep the same?)	**One Variable** (What will I change?)
	Measurements (What will I measure?)

Name _____   **Date** _____

Method: (How will I conduct the experiment?)

In the box below, draw and label a diagram of what your experiment will look like.

Results: (What happened during the experiment?)

Record the amount of water in each plastic bag at the end of the experiment.

	Plastic bag covered with bubble wrap	**Plastic bag covered with paper towel**	**Plastic bag covered with tin foil**
Amount of water (mL)			

Keeping Out the Heat – Science Experiment

Name _____   **Date** _____

Discussion: (What do your results tell you?)

Use the results of the experiment to answer the questions below.

1. Which plastic bag contained the least water at the end of the experiment?

   _____

   _____

2. Which plastic bag contained the most water at the end of the experiment?

   _____

   _____

3. What do these results tell you about these materials?

   _____

   _____

   _____

   _____

4. How could this information be useful?

   _____

   _____

   _____

   _____

Conclusion: (Was your hypothesis correct? How do you know?)

My hypothesis was correct / incorrect. I know this because _____

_____

_____.

PHYSICAL SCIENCES

teachstarter

Make an Eggshell Disappear

Make an Eggshell Disappear

Science topic: Chemistry

Let's Talk About It!

- Eggshells contain something called 'calcium carbonate'. This is what makes them hard.
- Vinegar is an acid known as 'acetic acid'.
- When calcium carbonate (the eggshell) and acetic acid (the vinegar) combine, **a chemical reaction** takes place and carbon dioxide (a gas) is released. This is what the bubbles are made of.
- By leaving the egg in the vinegar for a day, a chemical reaction occurs. This continues until all of the carbon in the eggshell is used up.
- When the egg is taken out of the vinegar, it is soft. This is because all of the carbon has floated out of the egg as bubbles.

Let's Experiment!

Materials

1 raw egg
1 cup of vinegar
Glass jar with lid
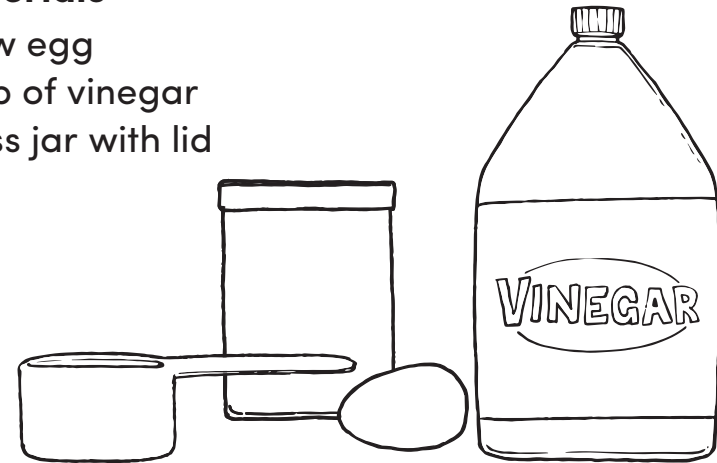
Method

1. Pour 1 cup of vinegar into a glass jar.

2. Carefully place the egg inside the jar of vinegar. You should notice tiny bubbles of carbon dioxide gas appear on the eggshell. This is one part of the chemical reaction.

3. Put the lid on the jar and leave it overnight (or longer if you can).

4. After a day or so, carefully remove the egg from the vinegar (don't throw away the vinegar yet). Gently rub off any remaining eggshell. If the eggshell isn't coming off easily, you may need to soak it for another day in the vinegar.

5. Now you have a rubbery, translucent egg!

Observations

In the box below, draw and label a diagram of what you observed during the experiment.
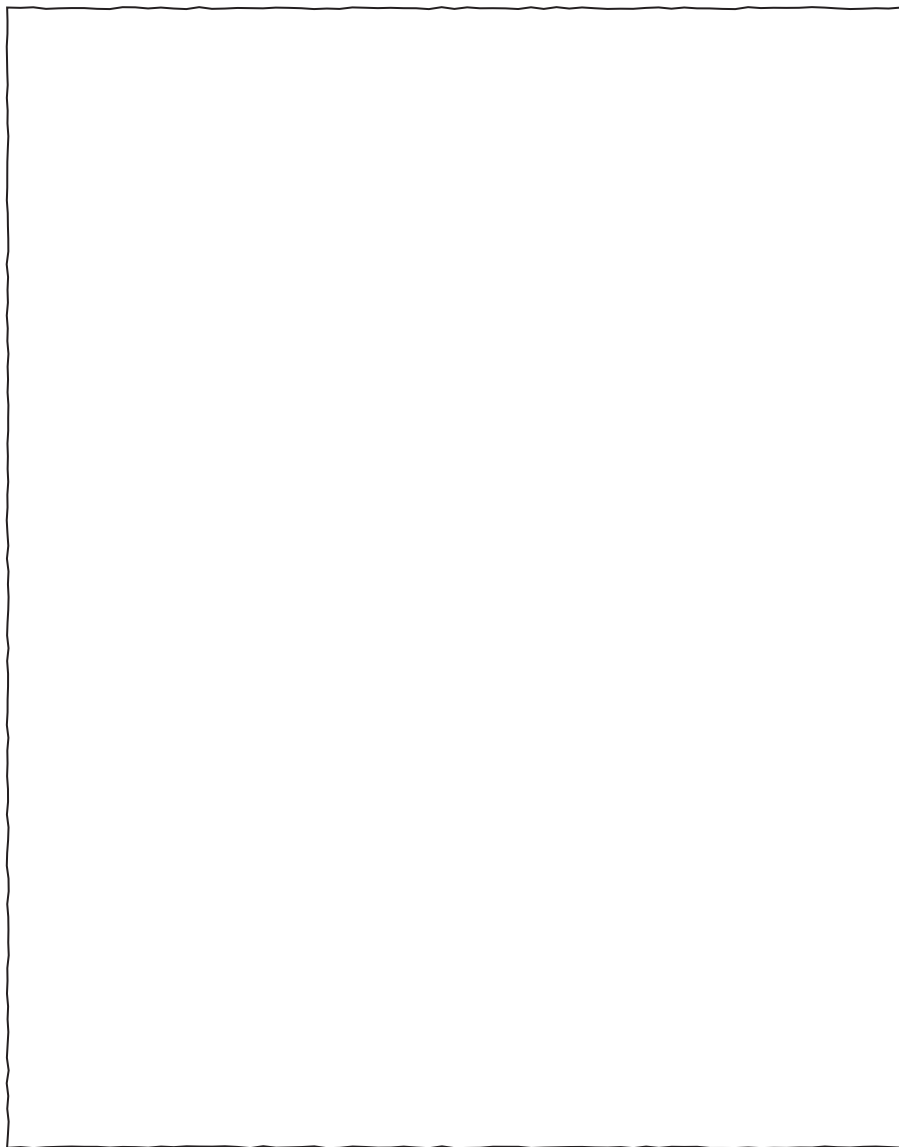
Take it Further

1. If you leave the translucent egg out of the vinegar overnight, what do you think will happen?

2. What do you think would happen if you used a cooked egg still in its shell?

3. Research some of the early chemists and the reactions they discovered.
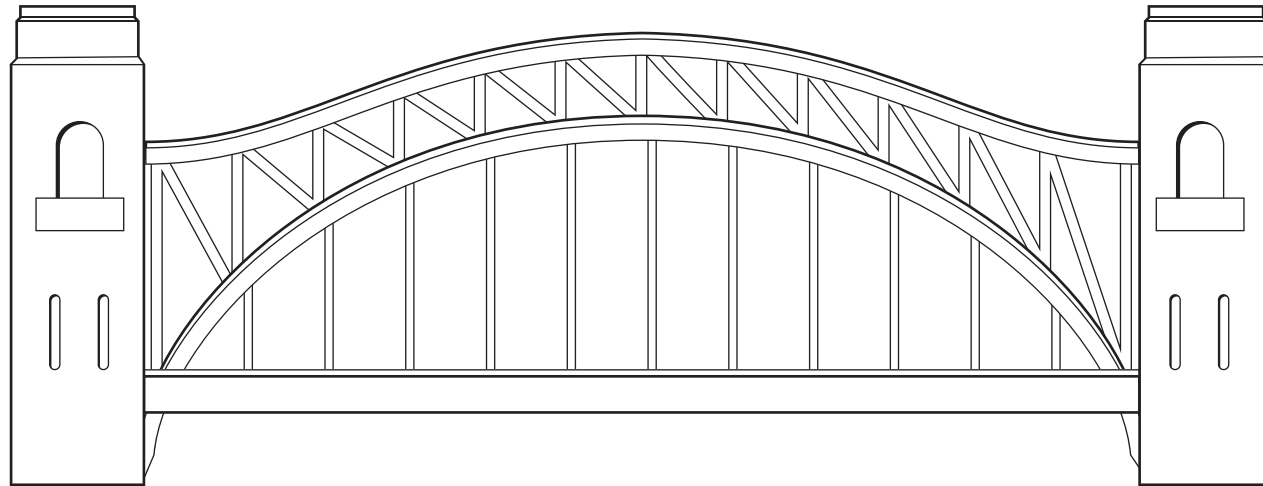
Berzelius 1779 – 1848

Notes

Best Dressed

Design and make a formal dress, out of old newspapers, for a female celebrity to wear to the Academy Awards.

TeachStarter.com

Build a Bridge

Design and make a bridge which can support the weight of 3 toy cars.

Textured Mandala

Task
Experiment with texture while making a mandala.

Materials
Scrap paper
Mandala template
Materials with contrasting textures, e.g. sandpaper (variety of grits), combs, corrugated card, fly screen, woven mats, etc.
Coloured pencils

Procedure
1. From your collection of materials, choose several objects that have interesting textures.
2. Place your scrap paper over the first material you have chosen.
3. Using a coloured pencil, shade over the material to see the pattern it creates.
4. You are experimenting to see which textures you would like to use on your mandala, so repeat the process with all of your chosen materials.
5. Once you have decided on the textures you like, move onto the mandala template. Rub your chosen textures onto the sections of the mandala. Keep in mind that repeated patterns work well.

Finished artwork
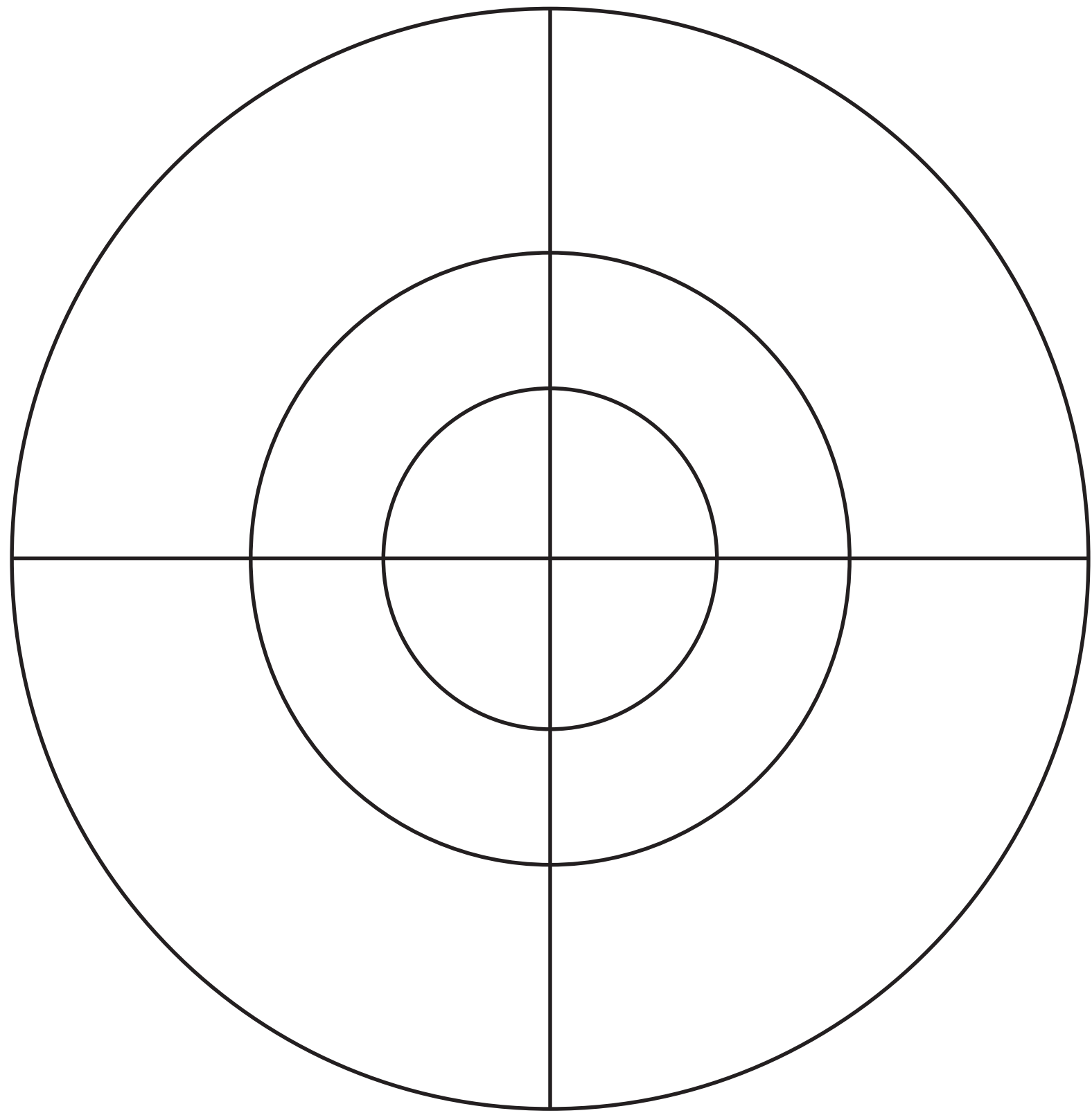
Crazy Hair Line Drawing

TASK

Create a portrait of someone with crazy hair by experimenting with different types of lines.

MATERIALS

a lead pencil, white card, a black marker, oil pastels or crayons

DIRECTIONS

1. Draw a person's face with a lead pencil on the bottom half of the white card.

2. Draw a variety of different lines (curly, straight, wavy) from the person's head to the top and side edges of the page.

3. Once you are happy with your design, trace over the lead pencil with a black marker.

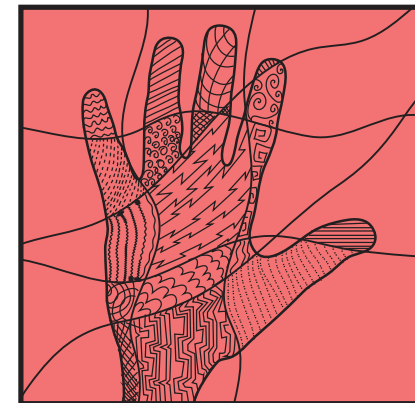4. Add colour to the crazy hair.

Patterned Hand Art

TASK

Create an abstract artwork by tracing your hand and experimenting with line.

MATERIALS

a lead pencil, coloured card, a black marker

DIRECTIONS

1. Trace your hand onto the coloured card with a lead pencil.

2. Make sure you have some of your wrist on the page.

3. Draw 6 wavy lines horizontally, vertically and diagonally across the page.

4. In each section on your hand, experiment with different line patterns.

5. Once you are happy with your design, use a black marker to trace over your patterns.