



The National Theatre for Children

The Knights of

STEMalot

SCIENCE
TECHNOLOGY
ENGINEERING
MATH

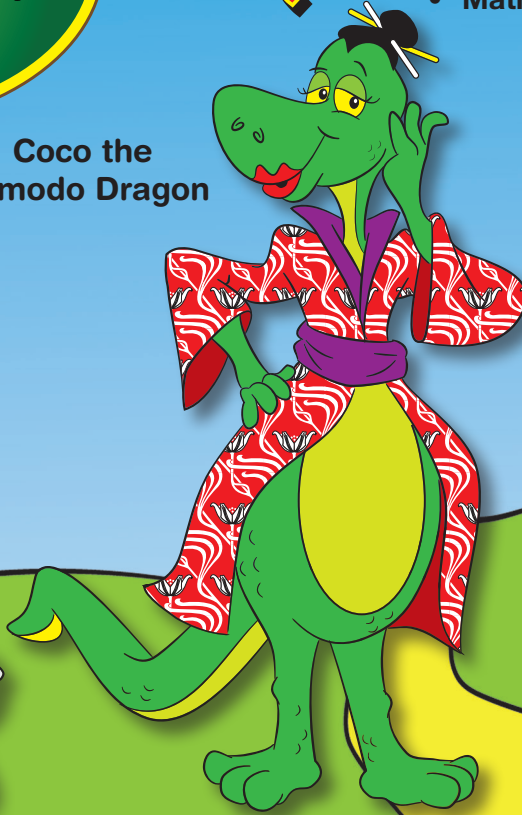


The Knights of **STEMalot**

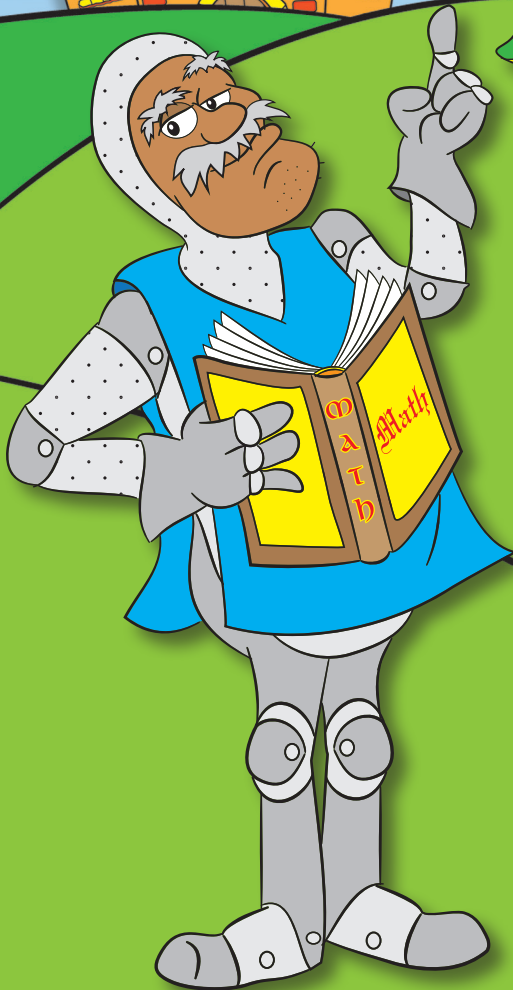
What to Learn:

- Science is about asking questions and finding answers
- Technology involves creation and innovation
- Engineering involves design and testing
- Math is used by you every day!

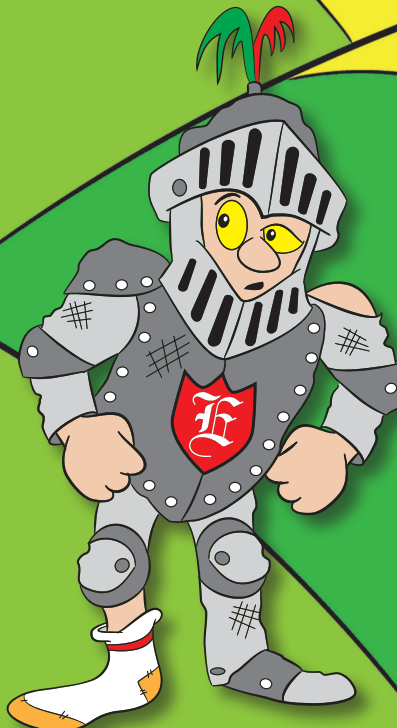
Coco the
Komodo Dragon



Merlin Monroe



Sir Grunts-a-lot



Evil McGee



Sydney Stemshire

MEET THE CHARACTERS FROM THE KNIGHTS OF

STEMALOT

Draw a line from each person to their name and description.

Merlin Monroe

A sorcerer who knows that engineering and technology are important to us all.

Sir Grunts-a-lot

The headmaster of Knight School who can't wait to tell you about math.

Coco the Komodo Dragon

The singing dragon who loves science.

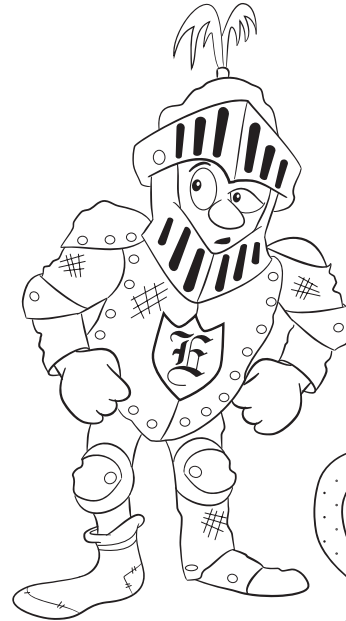
Sydney Stemshire

A knight-in-training who needs to learn about STEM in order to graduate.

Evil McGee

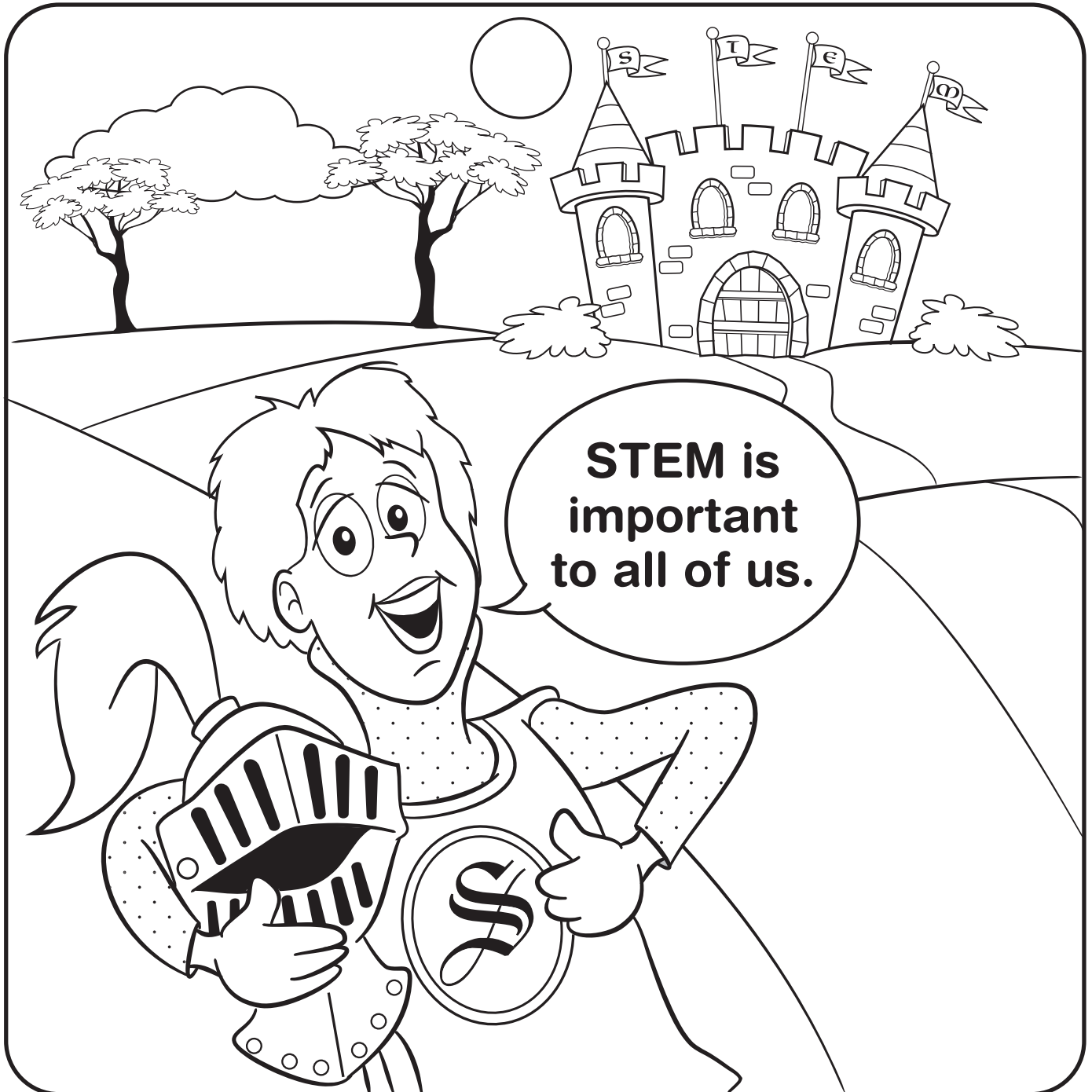
A loud-mouthed villain who does not like STEM.

Now that you know who we are, join us on our adventure to teach Sydney about science, technology, engineering and math.



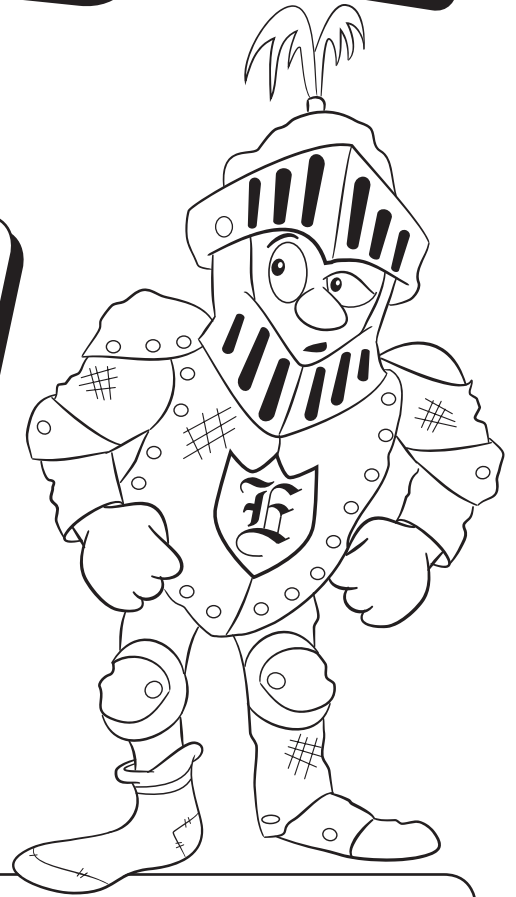
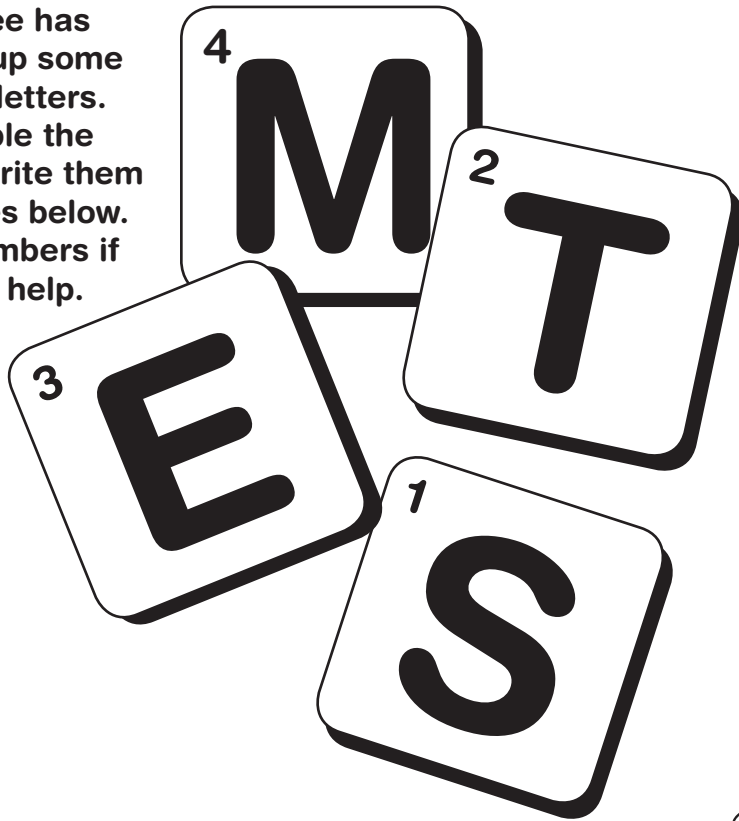
STEM IS FUN

STEM stands for Science, Technology, Engineering and Math. Color the picture.



STEMalot SCRAMBLE

Evil McGee has scrambled up some important letters. Unscramble the letters and write them in the spaces below. Use the numbers if you need help.



WE USE

1

2

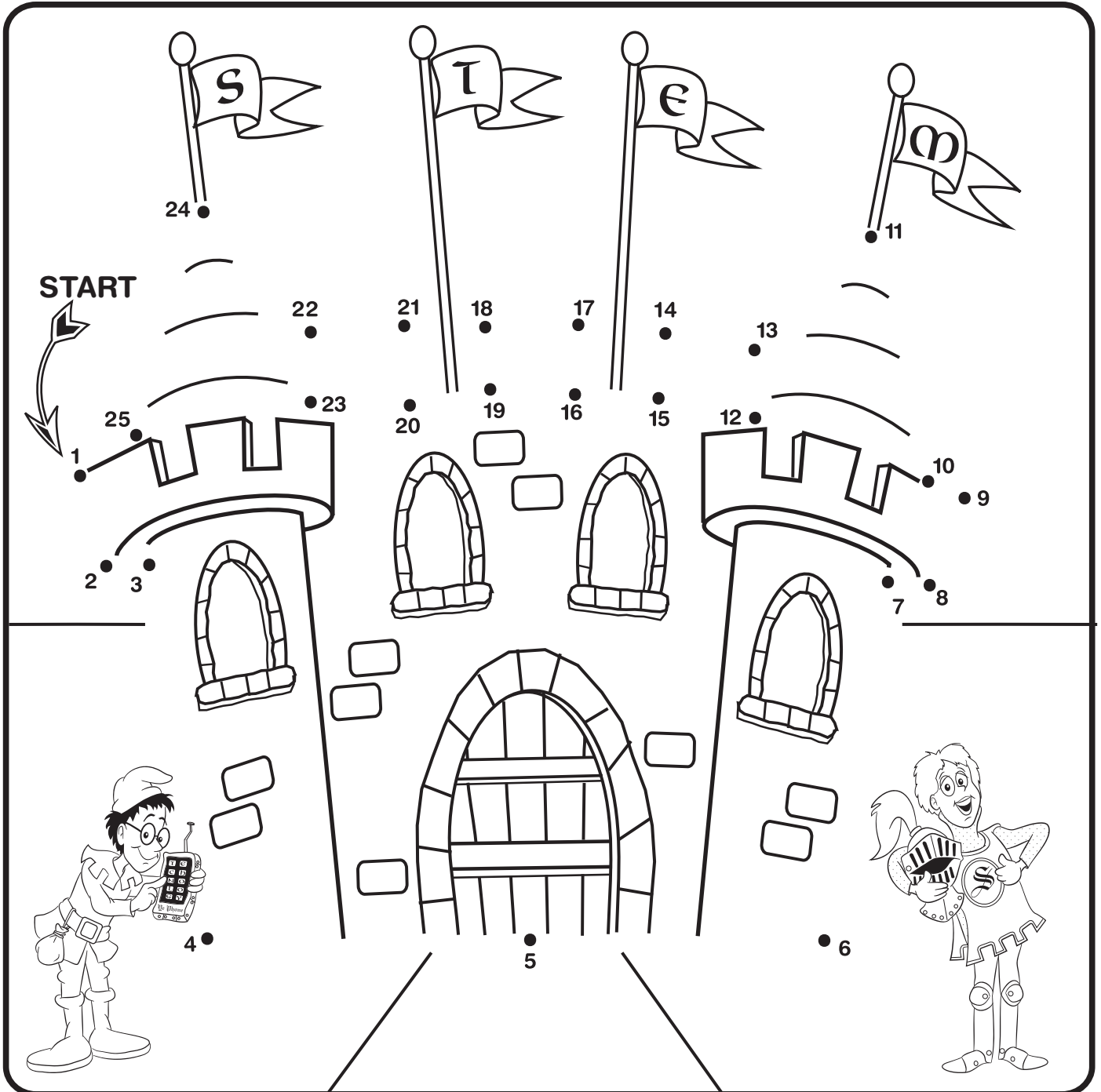
3

4

EVERY DAY.

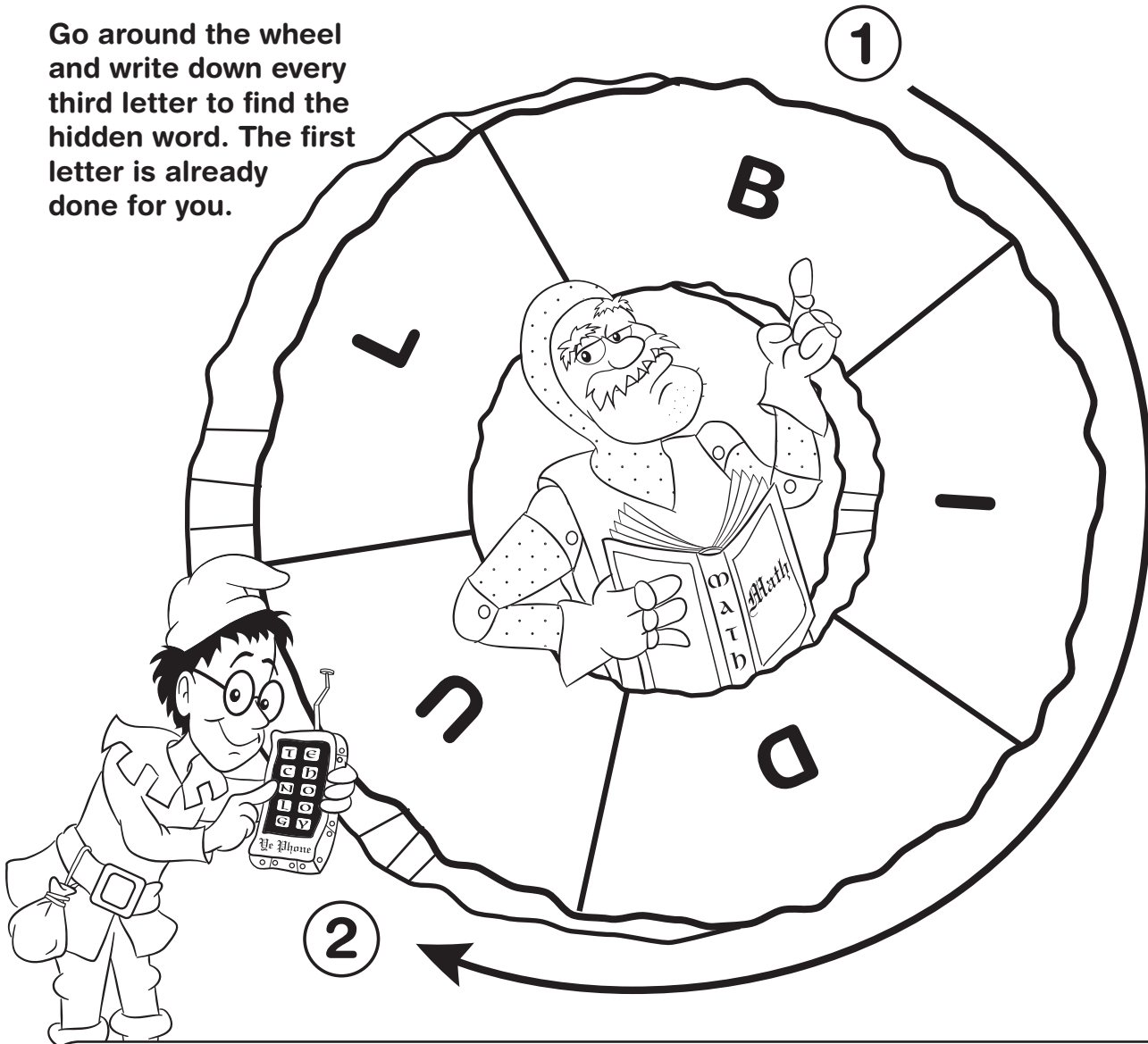
STEMalot DOT

Using science, technology, engineering and math, you can build many things.
Connect the dots and color the picture.



HOW TO BUILD A BETTER WHEEL

Go around the wheel and write down every third letter to find the hidden word. The first letter is already done for you.



ENGINEERS TEST AND

B

1

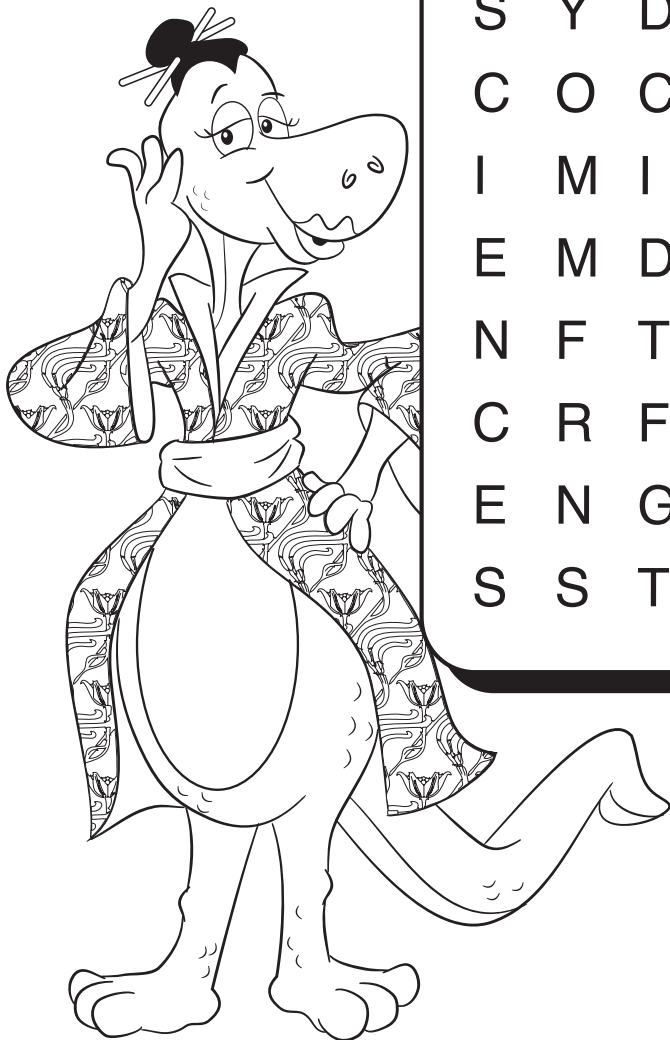
2

THINGS.

COCO THE KOMODO DRAGON'S

WORDFINDER

Find and circle all
of the words in
the puzzle from
the list below.



I	L	F	F	D	Y	I	N	M	Y	H
T	E	C	H	N	O	L	O	G	Y	W
A	A	A	Q	R	L	A	E	H	C	S
S	Y	D	N	E	Y	F	C	Y	M	A
C	O	C	O	F	S	D	E	Y	E	G
I	M	I	G	N	T	M	O	L	R	L
E	M	D	E	A	E	D	E	I	L	S
N	F	T	H	X	M	E	L	I	I	V
C	R	F	A	A	S	R	R	H	N	S
E	N	G	I	N	E	E	R	I	N	G
S	S	T	B	M	A	T	H	F	G	G

COCO

ENGINEERING

MATH

MERLIN

SCIENCE

STEM

SYDNEY

TECHNOLOGY

SIR GRUNTS-A-LOT

MATH MESSAGE

Sir Grunts-a-lot has a message for you. Do the math first, then fill in the letters that match the numbers on the blanks below.



$9 + 1 = \square$ M

$8 - 1 = \square$ S

$3 + 3 = \square$ U

$5 - 2 = \square$ O

$13 + 2 = \square$ T

$5 - 3 = \square$ E

$3 + 1 = \square$ D

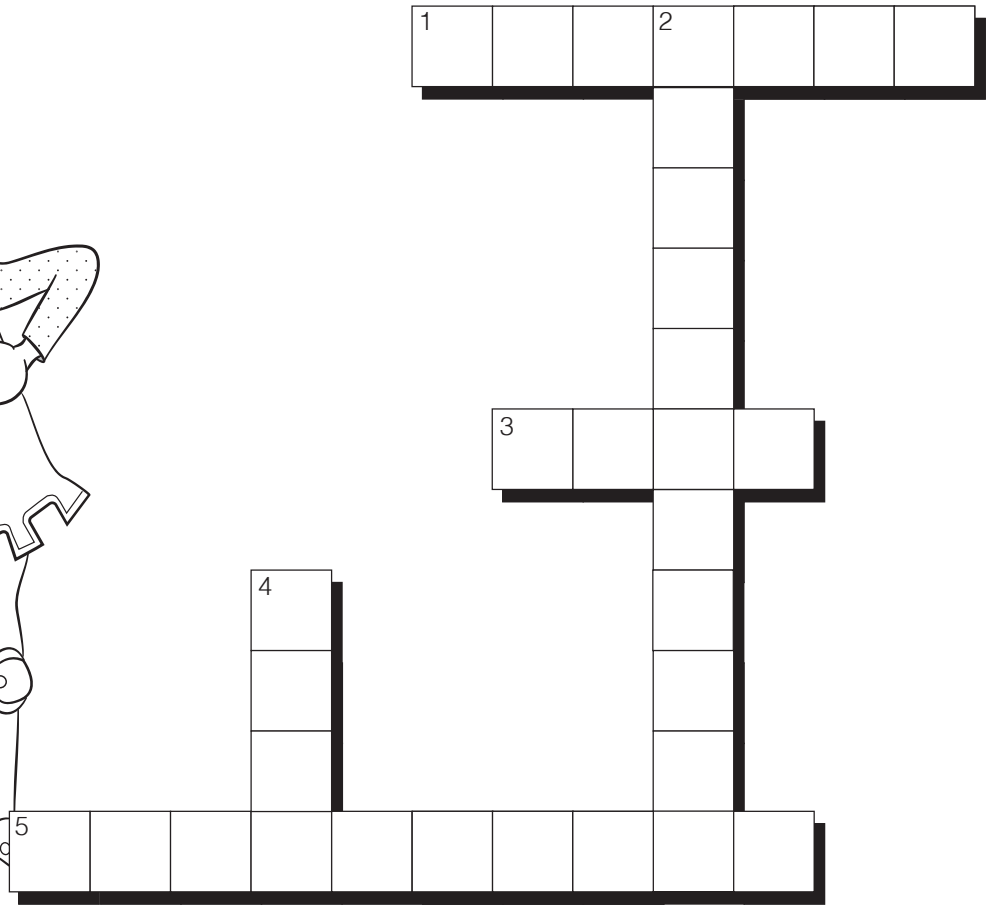
$10 - 2 = \square$ Y

$6 + 6 = \square$ A

6	7	2	7	15	2	10
15	3	4	12	8		

STEMalot CROSSWORD

Complete the crossword puzzle by matching the words with the clues below.



- ENGINEERING**
- MATH**
- SCIENCE**
- STEM**
- TECHNOLOGY**

ACROSS:

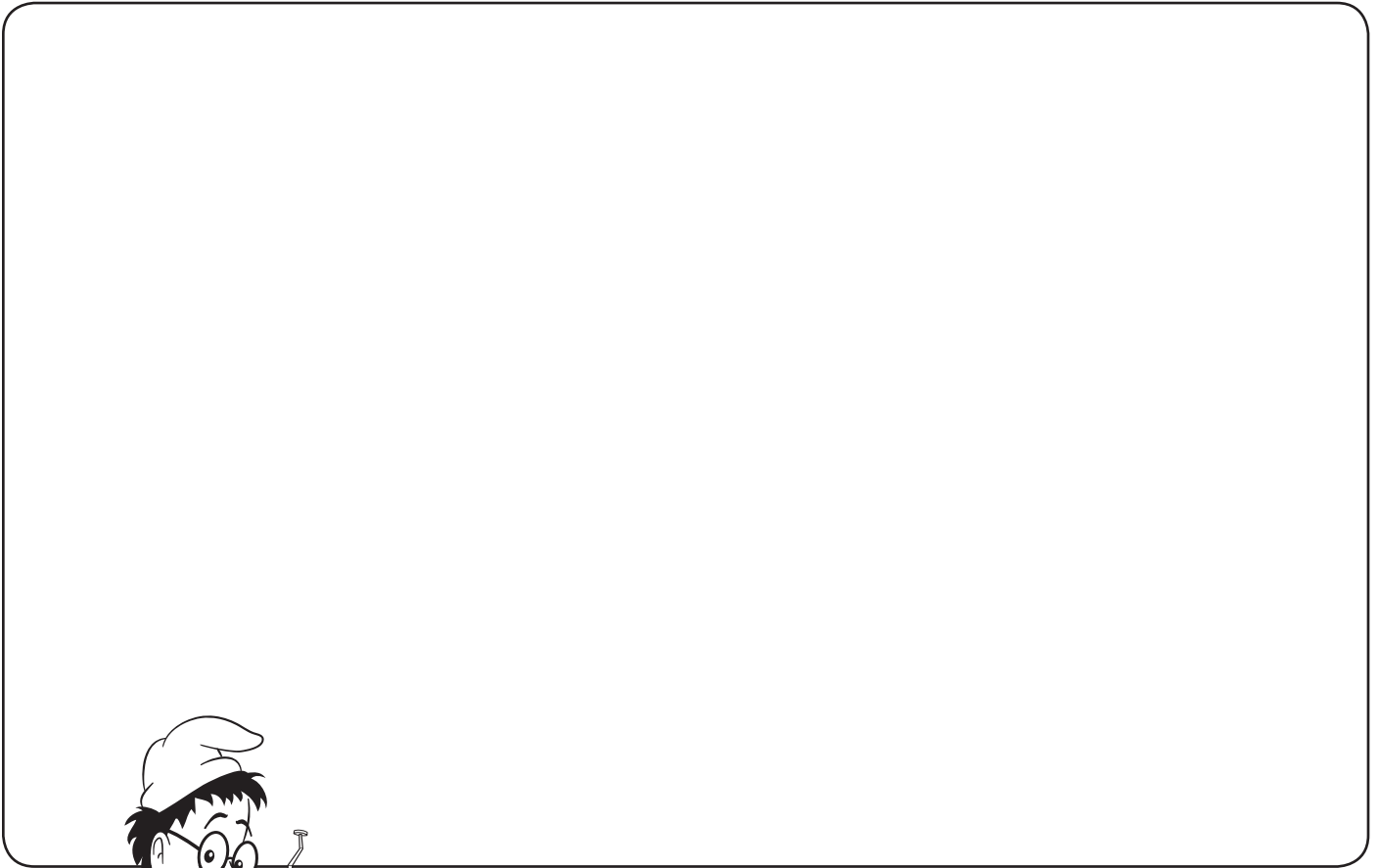
- 1. The study of the physical world.
- 3. The study of science, technology, engineering and mathematics.
- 5. The creation and usage of tools to solve a problem.

DOWN:

- 2. The testing of different ways to build things using design and technology.
- 3. The study of numbers, counting and measurements.

INVENTalot

Inventors use science, technology, engineering and math to come up with new products. Think of your own new invention. Draw a picture of it and describe it below.



Name your new product. _____

What does your product do? _____

How does it make something easier, faster, safer or better?

Which parts of STEM would you use to test or build it? _____

MAKE YOUR OWN NEWSPAPER. Write a headline and story about science, technology, engineering or math. Use another piece of paper if you need it. Next, draw a picture in the box and color it. Share what you know by reading your story to your family and friends.



the **STEM** SENTINEL

SCIENCE • TECHNOLOGY • ENGINEERING • MATH



Design
Engineering
Komodo Dragon
Math
Science
Solution
STEM
Technology
Tool

LET'S LEARN ABOUT STEM



Read the paragraphs below and then answer the True/False questions. Ask an adult if you need help.

EXTRA CREDIT: Read the article to someone else. Quiz them by asking the True/False questions.

STEM stands for **S**cience, **T**echnology, **E**ngineering and **M**ath. We use these to create new things and solve many problems.

Science is the study of the world around us. Scientists start with a problem and experiment with different ways to find a solution. A solution is the answer to a problem.

Technology helps us do things easier, faster, safer and better. Cell phones, computers and tablets are all examples of technology that help people work better.

Engineering uses design and testing to build new structures and machines. Almost everything we use requires some engineering.

Math is something we use every day. It's the process of comparing numbers and discovering totals. We use math when we purchase something. Math is used in science, technology and engineering to help find solutions to problems.

Remember to think smart with STEM!

- T / F** 1. STEM stands for Science, Technology, Engineering and Meatballs.
- T / F** 2. A solution is the answer to a problem.
- T / F** 3. New technology helps people do things easier, faster, safer and better.
- T / F** 4. Almost everything we use requires some engineering.
- T / F** 5. Math is something we use every day.
- T / F** 6. We do not use math to purchase things.

The Knights of
STEMalot
FAMILY ACTIVITY

We Use STEM a Lot!

Everybody utilizes the concepts we learned about Science, Technology, Engineering and Math every day. Let's see how many ways your family can think of. You get 1 point for each answer. See how many points you can get.



WAYS WE BENEFIT FROM SCIENCE:

1. _____
2. _____
3. _____
4. _____

TYPES OF TECHNOLOGY WE USE:

1. _____
2. _____
3. _____
4. _____

THINGS WE USE THAT REQUIRE ENGINEERING:

1. _____
2. _____
3. _____
4. _____

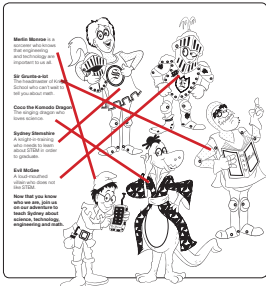
WAYS WE USE MATH:

1. _____
2. _____
3. _____
4. _____

Family Total

Scoring: 0–6 Points: Pretty Good 7–12 Points: Good Work 13–16 Points: Great!

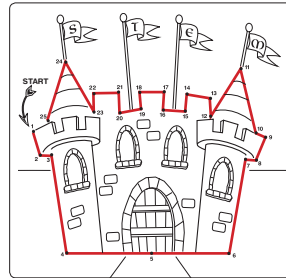
ANSWER KEY



Page 1

WE USE
S T E M
EVERY DAY.

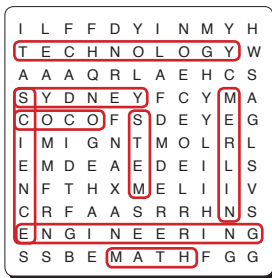
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Page 4

ENGINEERS TEST AND
B U I L D
THINGS.

Page 5



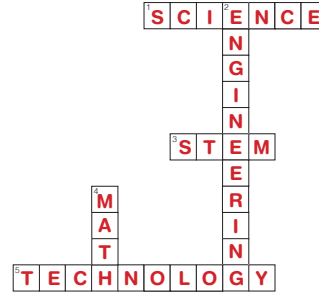
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$9 + 1 = 10$ M
 $8 - 1 = 7$ S
 $3 + 3 = 6$ U
 $5 - 2 = 3$ O

$13 + 2 = 15$ T
 $5 - 3 = 2$ E
 $3 + 1 = 4$ D
 $10 - 2 = 8$ Y
 $6 + 6 = 12$ A

USE STEM TODAY.

Page 7



Page 8

- T F
- T F
- T F
- T F
- T F

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GO TO: ^{NTC} **playworks.com**

You can find more fun and great learning activities on this topic and many more at www.NTCplayworks.com





M
A
T
H
Math



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