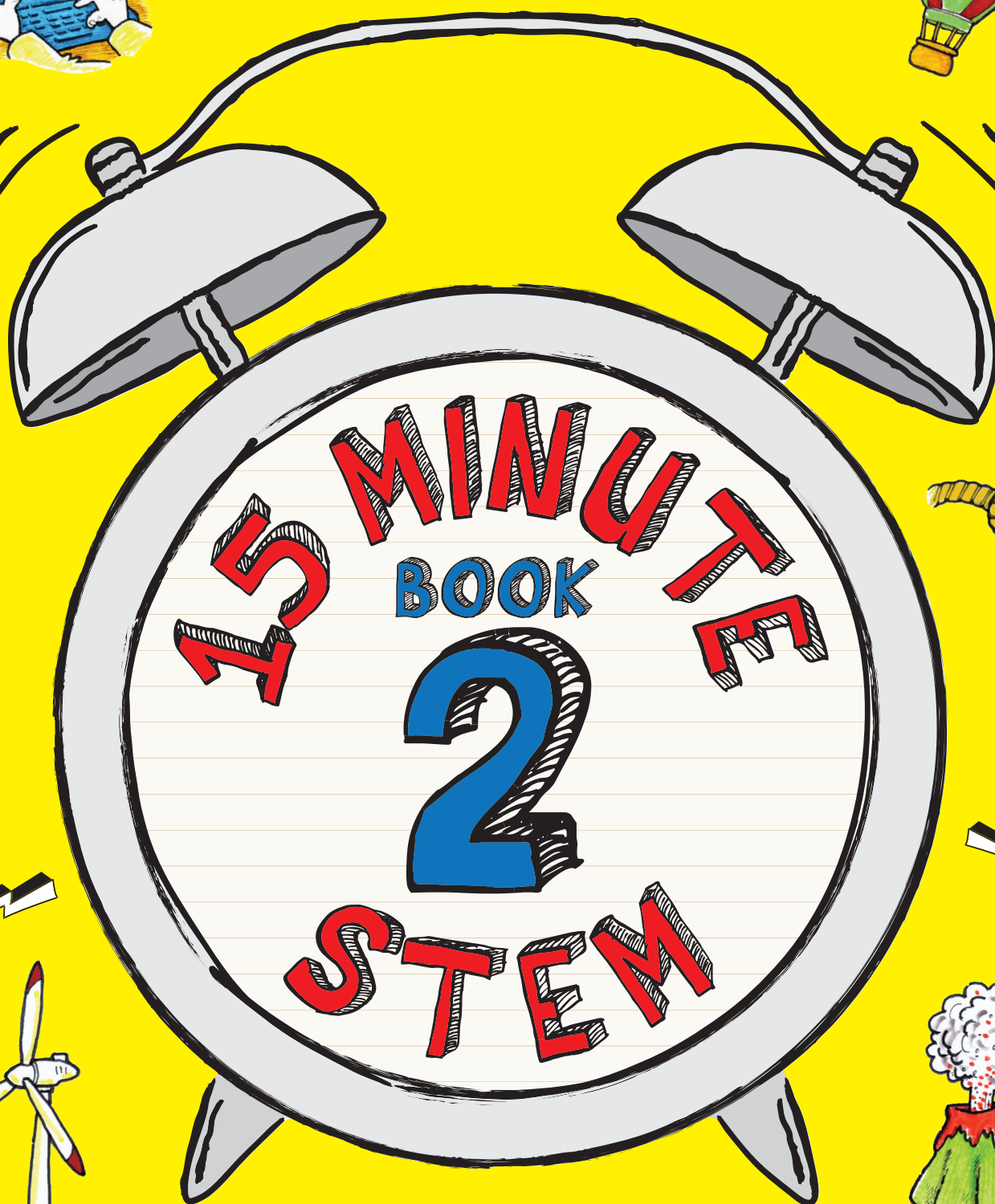
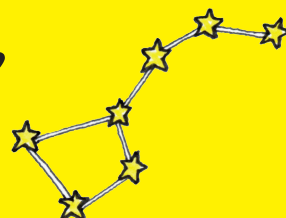




More quick, creative Science,
Technology, Engineering and Mathematics
activities for 5-11-year-olds





Can be
done inside



Can be done
individually



Suitable for
teams

24. PASTA SKELETONS

What does a human skeleton look like?

You will need

- A selection of different types of dried pasta (including spaghetti)
- Large piece of paper
- A pencil or pen
- Skeleton resource (see page 42)
- A timer

Investigate

Choose another vertebrate (animal with a backbone) (e.g. a dog) and find out what its skeleton looks like. Can you create it out of pasta? How does it differ from a human skeleton?

What are we learning?

The human skeleton contains around 300 bones at birth. Over time these bones fuse (join) together to create 206 bones by adulthood. While you will not have been able to represent all of these bones, you should have been able to create the overall skeleton structure, including the vertebrae (a series of small bones forming the backbone), the rib cage, the pelvis, the three arm bones (humerus, radius and ulna) and the four leg bones (femur, patella, tibia and fibula). Forensic scientists are able to analyse human bones to find out information about the person, including their age, gender and race.



How to do it

Note: The human skeleton is made up of lots of different bones, so it would be extremely difficult to represent them all! Instead, focus on creating the overall structure.

1. The challenge is to create the most accurate skeleton you can in just 15 minutes using pasta to represent the different bones.
2. Before you begin, draw the skull at the top of a large piece of paper.
3. Start the timer and begin to construct the rest of the skeleton. **Hint:** Start at the top and work downwards.
4. Look carefully at your skeleton and think about whether you have missed any important bones. Leave a gap between your pasta bones to represent the joints. Remember to use longer pieces of spaghetti to represent long bones and to snap your pasta or spaghetti pieces to represent smaller bones. If you find there is a bone that you cannot represent with pasta, you could always draw it instead.
5. Time is up! Step back and compare your skeleton to the skeleton resource. Which bones have you included? Which did you forget?

Optional: Younger children may find it helpful to take a quick look at the skeleton resource before they begin the activity, or to have a copy in front of them throughout the task.

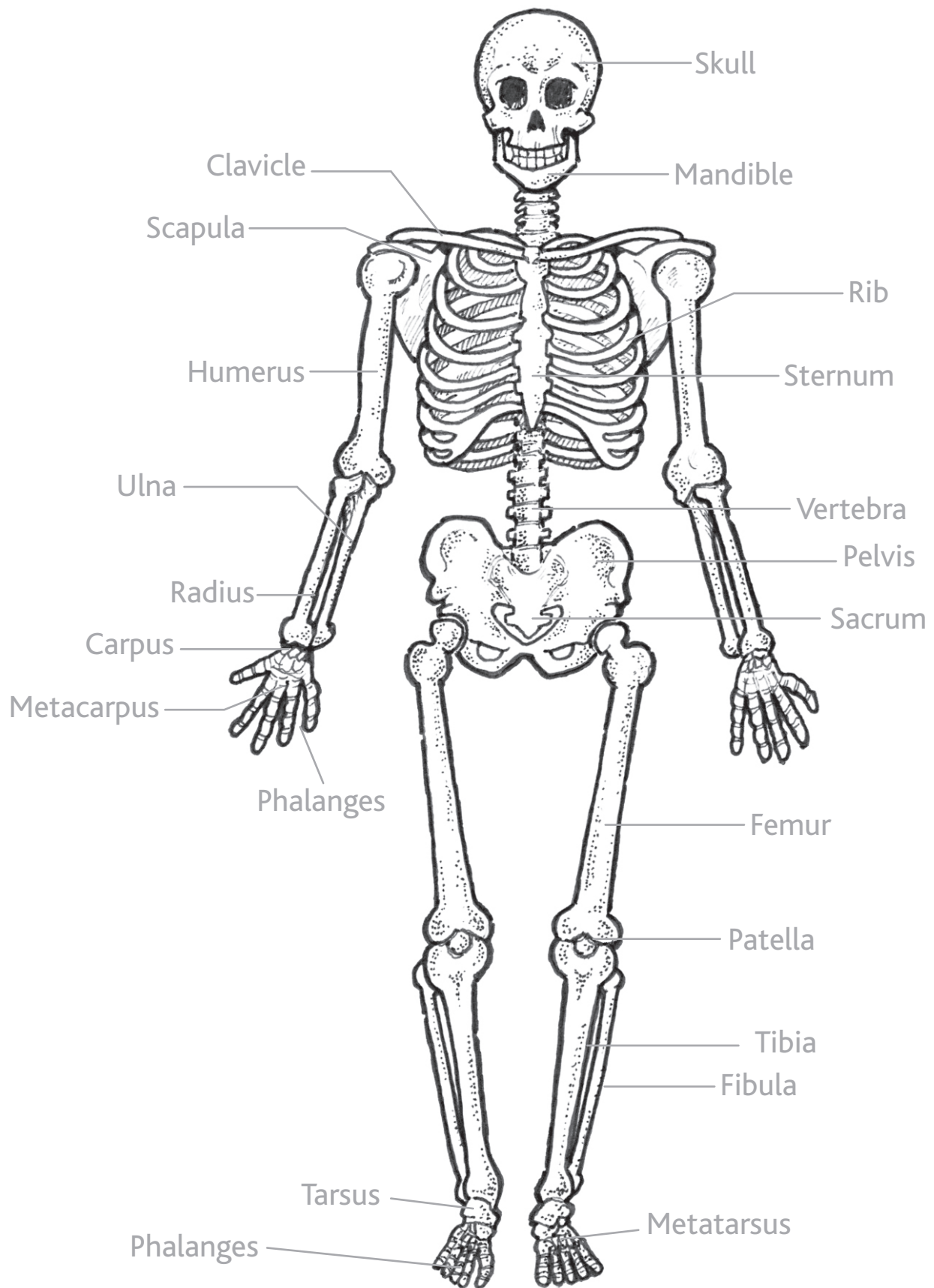


Doctor



Forensic
scientist

Skeleton Resource

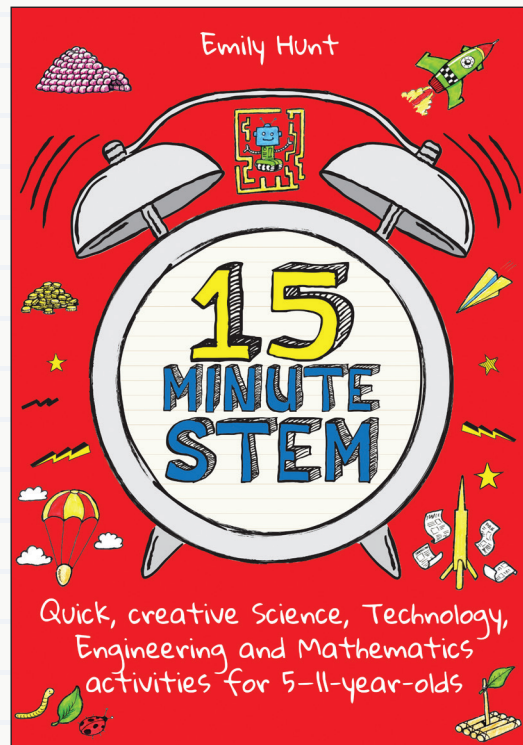


15-MINUTE STEM

Quick, creative Science, Technology, Engineering and Mathematics activities for 5-11-year-olds

Emily Hunt

ISBN: 978-178583335-9



Emily Hunt's *15-Minute STEM: Quick, creative science, technology, engineering and mathematics activities for 5–11-year-olds* offers an exciting collection of 40 tried-and-tested, easy-to-resource STEM activities designed to engage and inspire young learners.

From caring for our environment to the digital revolution, the demand for STEM skills is huge and is only set to grow. STEM is therefore an important priority area in modern education, leaving many teachers and parents asking questions such as 'How do I fit STEM education into my day?' and 'What kind of activities should I be exploring?'

Enter *15-Minute STEM* with the answers ...

This innovative resource has been designed to reassure teachers and parents that they don't need to be experts to deliver high-quality STEM education. Each of the 40 activities includes step-by-step instructions, takes just 15 minutes to complete and can be resourced from everyday materials found in the classroom or at home. This means that, with minimal preparation, teachers can slot these cross-curricular activities into an otherwise busy day, broadening their pupils' learning at no cost to their focus on core curriculum areas.

Suitable for both teachers and parents.

Building on the success of *15-Minute STEM*, Emily Hunt returns with another stimulating selection of easy-to-resource STEM activities designed to engage and inspire young learners.

Like most teachers and parents, you probably recognise STEM as being an important priority area for modern education. You may, however, be wondering:

- ⦿ What does STEM education look like for young learners?
- ⦿ How do I get children excited about STEM education?
- ⦿ How can children learn STEM skills in just 15 minutes?
- ⦿ What equipment do I need to teach STEM activities?

Enter 15-minute STEM with the answers!

Full of engaging and practical ideas, this resource reassures teachers and parents that they don't need to be experts to deliver high-quality STEM education.

This inspirational book is a must-have for any primary school staffroom or indeed for parents with young children. Emily Hunt has collected 40 imaginative, engaging and easy-to-access STEM activities that will open up the minds of our young people.

Bobby Seagull, school maths teacher, author of *The Life-Changing Magic of Numbers* and co-presenter of the BBC's *Monkman & Seagull's Genius Guide to Britain*

15-Minute STEM Book 2 offers highly engaging activities that walk you through the challenge, beginning with the set-up and materials and ending with connections to STEM careers as well as the concepts behind each activity. Your students will beg for more!

Carly and Adam Speicher, STEM Curriculum Developers at Carly and Adam LLC

Emily has compiled a perfect book for teachers and families looking for simple STEM activities to do with young children. Get this book for every parent and teacher you know!

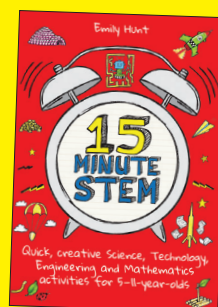
Chris Woods, teacher, speaker, STEM nerd and author of *Daily STEM*

15-Minute STEM Book 2 offers a wide range of inexpensive, hands-on activities to stoke young children's engagement and develop their transferable soft skills as they explore new ways of thinking and doing.

Dr Lyn Haynes, Science Tutor (Teach First Programme) and Senior Lecturer in Education, Canterbury Christ Church University

Also available

Emily Hunt is an experienced primary school teacher with a passion for promoting STEM education. She regularly writes articles and speaks about STEM, and shares activities and blogs on her website www.howtostem.co.uk. Emily holds a Masters of Education from the University of Cambridge and has also worked within the US education system to deliver science outreach.



ISBN: 978-178583335-9

 www.crownhouse.co.uk

ISBN 978-178583507-0



9 781785 835070
Education Teaching skills and techniques
Primary and middle school

