

# SEE STEM IN ACTION

**Dynamic, engaging and exhilarating** workshops to inspire pupils with STEM

Our Army STEM experts are delighted to offer a range of free STEM workshops for pupils aged 11-14 to help inspire the next generation. School based, curriculum aligned and very hands-on, all workshops have been specifically developed to spark and maintain your pupils' interest in STEM as they begin to consider their future subject and career options. So why wait?

**FREE** 

**CURRICULUM ALIGNED** 

**HANDS-ON** 



**OPERATION DISASTER RELIEF** 

**Help the Army to** deliver aid using Lego™ Mind-storm



**OPERATION ROCKET CAR** 



**OPERATION** FRONTLINE SCIENCE

No more labs. this is Science for a life outdoors



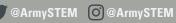
**OPERATION** WHO'S THE HACKER?

Can you complete this top-secret mission?

### **INTERESTED?**

or email bookaworkshop@armystem.co.uk to book a workshop now.









## **OPERATION DISASTER RELIEF**

**ACTIVITY LENGTH: IDEAL AGE GROUP:** 

2 - 2.5 hours 11-14

STEM skills are vital when the British Army deploys around the world and are never more crucial than when disaster strikes!

In this activity, pupils will join the Army's Engineers, Medics and Logisticians in deploying to a remote part of the world which has been hit by a destructive earthquake. Learning how to build, programme and operate their LEGO™ Mind-storm robot pupils will use their robot to undertake a series of engineering and logistical challenges in order to achieve their mission and deliver life-saving humanitarian aid to the local people.

#### STEM SKILLS APPLIED:

Programming, Maths, Technology, Engineering

#### **LIFE SKILLS DEVELOPED:**

Team Work, Leadership, Critical Thinking, Perseverance



## **OPERATION ROCKET CAR**

**ACTIVITY LENGTH: IDEAL AGE GROUP:** 

2.5 - 3 hours

11-14

Set your pupils on an engineering adventure of discovery, where they will explore the incredible possibilities of breaking records using STEM!

Suitable for all abilities, pupils will learn about rocket cars, their land speed records and the foundational STEM principles behind it before moving on to the challenge of working in teams to design, build and launching their own rocket cars! To be successful, pupils must apply the STEM fundamentals of weight and aerodynamics to their own design. They will be able to record real-time data such as their car's speed and acceleration for analysis in their challenge debrief.

#### **STEM SKILLS APPLIED:**

Engineering, Technology

#### LIFE SKILLS DEVELOPED:

Team Work, Critical Thinking, Perseverance



## **OPERATION** FRONTLINE SCIENCE

**ACTIVITY LENGTH: IDEAL AGE GROUP:** 

11-14

encourage pupils, working in small teams, to apply the principles of

Each science has a different challenge such as a new hi-tech helmet workshop pupils will get hands-on experience as they consider

#### **STEM SKILLS APPLIED:**

#### **LIFE SKILLS DEVELOPED:**

Team Work, Critical Thinking, Perseverance



## **OPERATION** WHO'S THE HACKER?

**ACTIVITY LENGTH:** 

**IDEAL AGE GROUP:** 

1.5 - 2 hours

11-14

Students take on this mission from the Commanding Officer to stop a cyber-attack on the British Army Head Quarters. Pupils will join soldiers from the Royal Signals and Intelligence Corps and analyse the evidence in this top-secret mission.

Pupils must identify which of the five suspects is behind this planned attack to stop the hacker in their trackers to defend confidential documents and protect national security

#### **STEM SKILLS APPLIED:**

Maths, Problem Solving, Logic and Reasoning

#### **LIFE SKILLS DEVELOPED:**

Working Under Pressure, Critical Thinking and Team Work