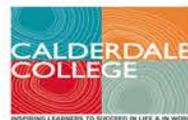


# The Importance of STEM Industries



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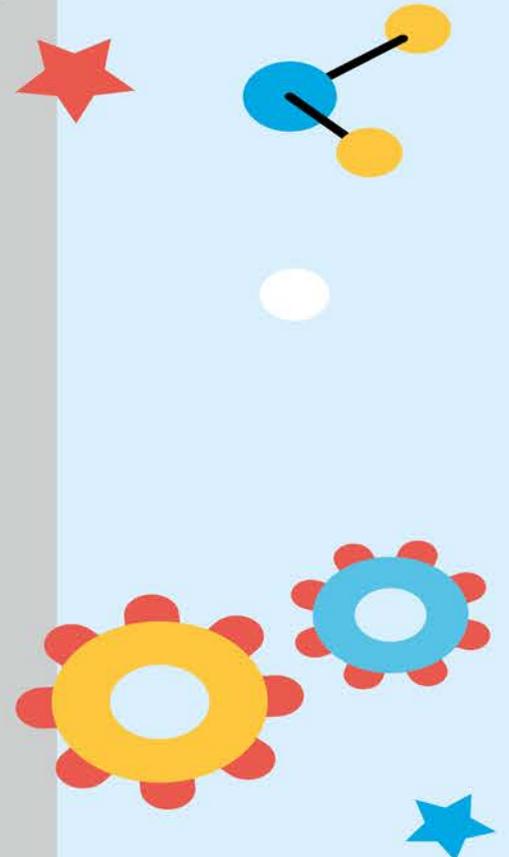


**Cogent skills**  
for science industries

[www.cogentskills.com](http://www.cogentskills.com)

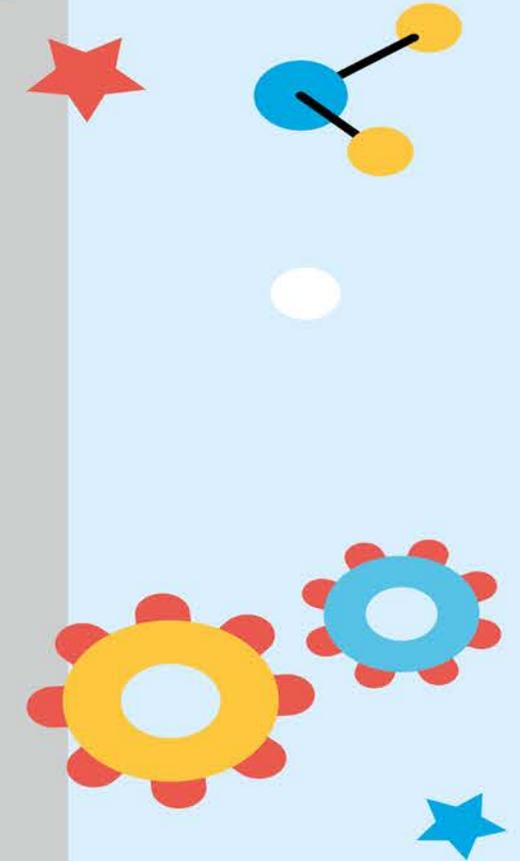
# > STEM in Yorkshire and the Humber

- The Humber is known as the UK's Energy Estuary.
- STEM organisations include energy and engineering companies, chemical and food manufacturers.
- The Port of Grimsby provides opportunities in offshore wind turbine technology.
- The Humber area is home to the UK's busiest port by cargo tonnage and Goole has the UK's furthest inland port and centre for distribution, making logistics an important sector.
- Hull and East Riding are aiming to become a world-class centre for renewable energy.



## > STEM in Yorkshire and the Humber

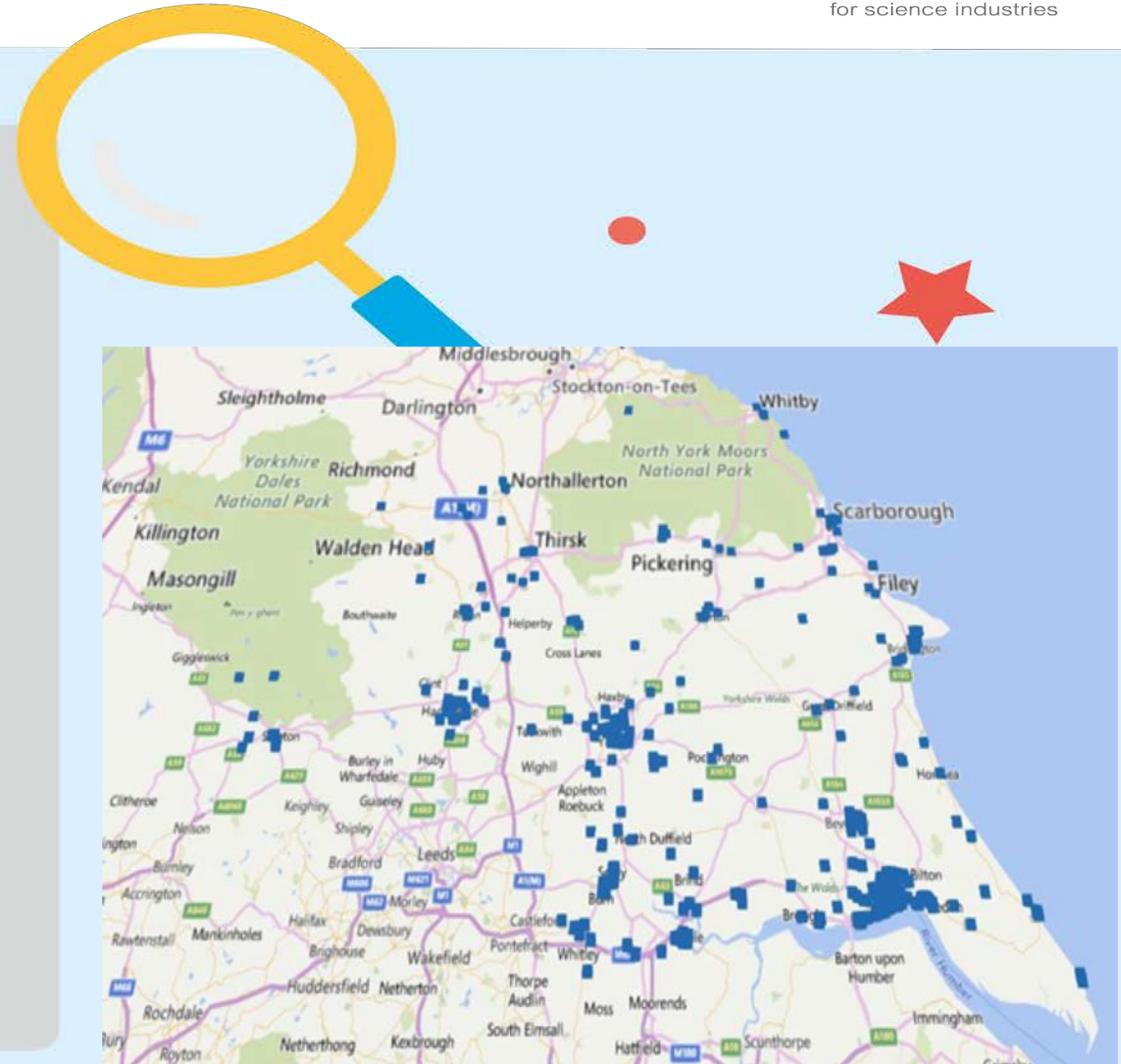
- Transport and infrastructure will see the biggest growth in construction projects in Yorkshire and the Humber. The industry will need to recruit 1,860 new people each year up to 2021. Most of the jobs will be needed in professional, managerial/supervisory roles.
- The University of York is ranked as one of the top 10 places to study Biological Science in the UK.
- Agri-food, bio-renewables and bioscience are important and growing sectors in the region. The National Agri-food Innovation Campus is just outside York.



# > STEM in York, North Yorkshire and East Riding

STEM businesses in the area include:

- Siemens turbine assembly facility and blade manufacturing factory at Alexandra Dock
- Drax Biomass and ICI Paints at Goole
- BP, Nippon Gohsei, Ineos, Vivergo Fuel at Paull
- BAE Systems, Blackcat Group, Cablescon, Crystal Brew Ales, RexRob Engineering, Howdens Joinery, Sewell Group, Eco Engineering Ltd. and Supercraft at Brough
- RB, Smith and Nephew, and Croda in Hull
- The area supports a number of science companies working in pharmaceuticals, chemicals, energy and polymers.



# > Lesson Plan 3

## STEM Opportunities



Duration: 30 – 45 minutes

### Aims:

- Learn about STEM industry and careers in the region.
- Explore different careers using the Cogent Careers Choices online tool.

### Skills:

- STEM Knowledge
- Careers Knowledge
- Research Skills

### Resources:

- Lesson Plan
- Regional Information slides
- Laptops or PCs
- Cogent Careers Choices online tool

### Preparation:

- Download the Regional Information slides
- Load Cogent Careers Choices online tool: [www.cogentskills.com/careers/careers-choices/](http://www.cogentskills.com/careers/careers-choices/)



### Activity 1:

- 1) Ask the group what STEM companies they know of in your region and what do they do?  
– how many can they think of?
- 2) Discuss the Regional Information slides to showcase the opportunities in STEM within your region.



### Activity 2:

1. Make sure pupils have access to laptops or PCs (individually or in small groups of 2-3).
2. Log onto the Cogent Careers Choices online tool: [www.cogentskills.com/careers/careers-choices/](http://www.cogentskills.com/careers/careers-choices/)
3. Ask the students to complete the questions and explore the jobs that are generated based on their answers. Perhaps they can print off their favourite to take home.

