




<b>Student Names:</b>			
<b>School:</b>			
<b>Activity Title:</b>	Empathetic Modelling for Arthritis		
<b>Topic/Area Covered:</b>	Design and Manufacture Engineering Management		
<b>No of pupils</b>	<b>20</b>	<b>Duration of Session</b>	2x 50 minutes

<p><b>Activity Summary:</b> (100 words max)</p>	<p>Using coins taped to the knuckles on your hand to simulate the experience of having arthritis and how it affects hand control.</p>  <p>One of the group's solution to the struggle of opening Tupperware.</p>  <p>Another solution to the difficulty of using a handle on a mug.</p> 
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## Activity Aims:

### **Promote design thinking mindset**

The purpose of our activity is to showcase the wide variety of disciplines within engineering and highlight that there is more than just 'traditional' engineering. We believe this would be particularly engaging for a guide pack (girls from 10 – 14) as girls are still underrepresented within STEM and this is an age group where they will be thinking about secondary school, choosing subjects and their futures. Our activity would look at human centered design by conducting empathetic modelling which entails completing tasks allowing you to relate to and better understand the target consumer. We have chosen to look at the issues people with arthritis face in their everyday lives as it is not something guides would have probably thought about before. Yet, arthritis is a big concern in the UK as 10 million people in the UK suffer from it which equates to approximately 15% of the population.

### **Collaboration and teamwork skills**

## Resources/Materials Required

Qty	Resource/Materials
10	Coins (10 per person)
6	tape
3	mug
	Cardboard (can be collected from local businesses + uni workshop)
bag	Cotton wool
3 packs	Plasticine
20	Straws
1	Tupperware

## Lesson Plan

Time	Activity	Resources Needed	Notes
8min	Introduction (Personal + Activity)	Projector	
30min	In few groups. One task (from above per group)	A per task	
5min	Judging		
7min	Debrief	Projector	<ul style="list-style-type: none"> <li>• Highlight engineering concepts from the activity</li> <li>• Introduce engineering as a subject</li> </ul>
