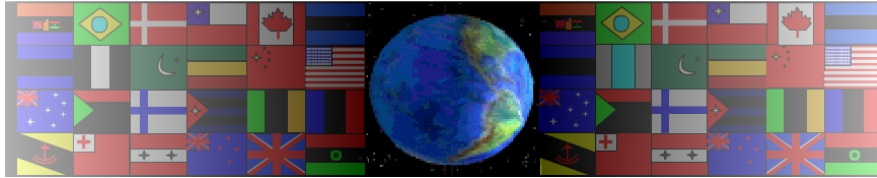


# PROBLEM CARDS - STARTER / DISCUSSION EXERCISES

V.Ryan © 2000 - 2017

On behalf of The World Association of Technology Teachers

## W.A.T.T.



World Association of Technology Teachers

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## PROBLEM CARD

Waiting for the bus, to go to school / college.

What design opportunities do you see in this photograph?



### PROBLEM

*Standing up for twenty minutes, until the bus arrives. No seating available.*

### BRIEF

*Design a lightweight, folding seat that can be carried easily, possibly fitting into a bag.*

## PROBLEM CARD

Waiting for the bus, to go to school / college.

What design opportunities do you see in this photograph?



### PROBLEM

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### BRIEF

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## PROBLEM CARD

Reading a book at school or when travelling.

What design opportunities do you see in this photograph?



### PROBLEM

*Book marks often fall out of my book. I loose the page I have marked and waste time finding it again.*

### BRIEF

*Design a bookmark that is impossible to dislodge. It could have other uses such as .....*

## PROBLEM CARD

Reading a book at school or when travelling.

What design opportunities do you see in this photograph?



### PROBLEM

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### BRIEF

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## PROBLEM CARD

Taking out the correct pen and pencil from a pencil case.

What design opportunities do you see in this photograph?



### PROBLEM

*Finding the right pen / pencil and taking it from a pencil case straightaway, is difficult.*

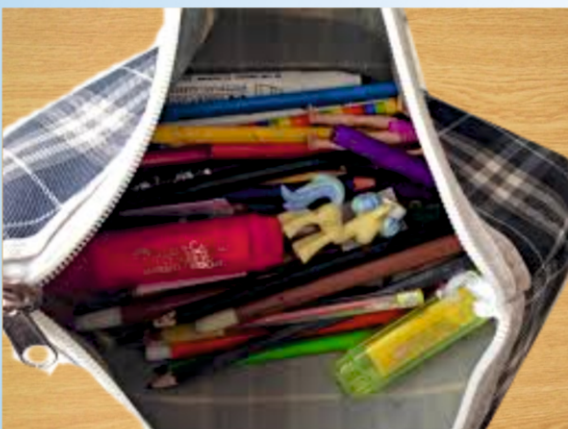
### BRIEF

*Design a pen / pencil / stationary holder that 'presents' my pen straight to me, when I need it.*

## PROBLEM CARD

Taking out the correct pen and pencil from a pencil case.

What design opportunities do you see in this photograph?



### PROBLEM

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### BRIEF

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## PROBLEM CARD

Possibility of damage to expensive spectacles.

What design opportunities do you see in this photograph?



### PROBLEM

*Some of my friends have knocked their spectacles off a table, breaking them.*

### BRIEF

*Design a 'snap on' accessory for table tops, so that spectacles are held safely and cannot be knocked to the floor.*

## PROBLEM CARD

Possibility of damage to expensive spectacles.

What design opportunities do you see in this photograph?



### PROBLEM

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### BRIEF

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## PROBLEM CARD

Holding a drink, whilst sat on the settee watching TV or reading.

What design opportunities do you see in this photograph?



### PROBLEM

*When my brother watches TV, he holds a drink in his hand. On at least one occasion, he has split it.*

### BRIEF

*Design a self balancing cup / glass holder, that prevents spilling.*

## PROBLEM CARD

Holding a drink, whilst sat on the settee watching TV or reading.

What design opportunities do you see in this photograph?



### PROBLEM

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### BRIEF

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## PROBLEM CARD

**My friend completes her homework (writing and sketching) sat on the settee, not at a table.**

**What design opportunities do you see in this photograph?**



### **PROBLEM**

*She finds it difficult to write and sketch, even with a board underneath her work.*

### **BRIEF**

*Design a lightweight 'system', that holds paper level and securely, allowing the user to sit comfortably.*

## PROBLEM CARD

**My friend completes her homework (writing and sketching) sat on the settee, not at a table.**

**What design opportunities do you see in this photograph?**



### **PROBLEM**

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### **BRIEF**

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## PROBLEM CARD

I was watching a construction worker / builder working on a building site, using a range of tools.

What design opportunities do you see in this photograph?

### PROBLEM

*He had a small selection of tools laid out on the ground. This was a trip hazard.*

### BRIEF

*Design a tools/equipment organiser, that is easy to carry and allows easy selection and access.*



## PROBLEM CARD

I was watching a construction worker / builder working on a building site, using a range of tools.

What design opportunities do you see in this photograph?

### PROBLEM

### BRIEF



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## PROBLEM CARD

Recently, a neighbour has been using a ladder, when painting the eaves of his house.

What design opportunities do you see in this photograph?



### PROBLEM

*The neighbour held the paint tin in one hand, and was painting with his other hand. This looked dangerous.*

### BRIEF

*Design a paint tin holder for ladders, that allows the user to hold on to the ladder with one hand, whilst using a brush with the other.*

## PROBLEM CARD

Recently, a neighbour has been using a ladder, when painting the eaves of his house.

What design opportunities do you see in this photograph?



### PROBLEM

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### BRIEF

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