



## Problem Posing Pro-Forma: use of videos

### Assumption

A numerical or maths problem has multiple solutions or none, it is framed as an open-ended question. There is no clear path to the answer – students cannot easily use a formula. Within the problem, students are often given too much information or not enough

### [What is under the box?](#)

1. Activity Name: What is under the box?
2. Expected duration of activity: 5 min
3. What EQF level is the activity (approximately)? EQF level 2-4
4. What is the topic? Geometry, logic and perception.
5. What are the Learning Outcomes? This problem works as a math snack in between topics.
6. Prerequisite/prior knowledge assumed? Ability to perceive 2D and 3D pictures.
7. In what ways does the problem, or the way the problem is delivered to the students:
  - encourage critical way of investigating and thinking? The meaning of this task is more to encourage logical thinking.
  - encourage analysis? Teacher could ask that how many students solved the colour under the box.
  - allow students to be creative? Yes,
  - allow independent learning? Should be done individually.
  - allow for co-operative learning? This task is better individually.
  - allow students time to think? Video is so short and goes fast that teacher might have to play it several times.
  - have a relevant or interesting context?
  - allow for multiple ways of solving or investigating the challenge? There is no multiple ways of solving the challenge and there is no multiple ways of investigating it.

[Type here]

8. Resources or materials required? Just the video.
9. What technology is required in the delivery of the problem? Equipment to watch the video.
10. What technology might potentially be required in the solving of the problem?  
Nothing
11. Suggestions for delivery:
  - Maybe it should read 'What is on the bottom of the box?'
  - Would it be better if the box moved a bit more slowly? I could see strengths in it moving more quickly but it might depend on the level of learners engaging with it.
  - Would solid polygon shapes work better than an outline (I am not sure just wondering!)
  - Again just a thought would a hint half way through be useful e.g. What kind of shapes can you see on the box (polygons)?