Teacher preparation - reflection pre- and post-activity

Curved fold

What are the learning and consolidation opportunities in this paper-folding activity?

Consider other ideas besides the perpendicular bisector construction.

In your opinion what are the benefits of exposing pupils to a practical illustration of the meaning of algebraic formulations (for example, the meaning of the equation of a parabola and the graphical interpretation of parameters such as the distance between the focus and the vertex, etc).
How can this topic be used to help introduce or motivate with respect to other mathematical topics and skills?

How would the learners benefit from this approach?

What are your expectations of the learners’ manual abilities? What are your expectations of the learners’ ability to link practical tasks to mathematical ones?
How would you implement this activity in the classroom? You may want to take into account the following points:

(before the lesson)

- Which competences does it address?
- What is the point of it?
- Did you feel challenged as a teacher? What are the benefits of going through a learning experience as a teacher?
- How can you adapt the activity to different year groups?
- What are the possible pitfalls?
- What do you say when a pupil says that this is not mathematics? (e.g. ‘Miss/Sir, paper folding is not mathematics. Why are we doing this?’)
- What are the benefits of such an activity for: Yr7 pupils; GCSE pupils; sixth formers?
- How can you address differentiation of pupils? (one way is using pupils that picked it up more quickly as helpers)
- What is the value of working in groups for pupils?
- What is the value of working in a team with other teachers to develop activities?
- What have you learnt as a teacher preparing this activity?
- What mathematics have you learnt in preparing this activity?

(after the lesson)

- What are your thoughts on using the style of this session as your teaching style?
- What have you learnt today as a teacher?
- Did you feel challenged as a teacher? What are the benefits of moving outside our comfort zone?
- What are the potential pitfalls of these activities? How did you overcome these possible problems?
- What have you discovered about your pupils’ manual abilities?

Ideas for the activity and the worksheet were taken from the book *Project Origami* by Thomas Hull.