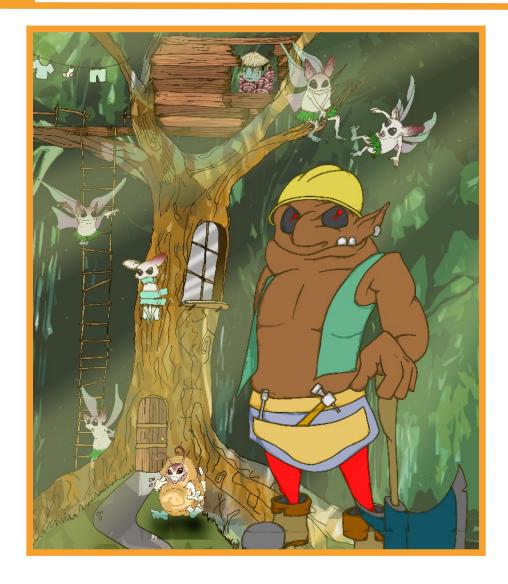
### Battle for Angle Forest

#### **Connect Four**



Estimating and comparing are two important components of maths and in this activity the pupils look at the angles presented and decide if they are more or less than the angles on the Game Board. At the same time, they can also play collaboratively building up the story of Angle Forest to see if they can save it from destruction.

Suitable for pupils aged 8+

The Learning Outcome will be that pupils will know if the angles they see are more or less than obtuse, acute, reflex, right angles or straight line angles.

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### Battle for Angle Forest Connect Four

Developed by Steve Cooke and Graham Lawlor Illustrated by Peter Bennett

Theme: Angles Age range: 8+

#### Context:

Estimating and comparing are two important components of maths. In this activity, pupils look at a set of angles and decide if they are more or less than the angles described on the Game Board. At the same time they can also play collaboratively, building up the story of Angle Forest to see if they can save it from destruction.

If you make your own version please send it to the address below to help expand our library.

#### Preparation:

Print out the A<sub>4</sub> sheets.

If possible, laminate the "baseboards" and cover the pages of the cards with 'clear pvc self adhesive film'. Then cut out along the dotted lines to make the cards.

#### HOW TO PLAY:

The instructions below are also on the next page so that each group playing has their own.

- 1. You need four players, one Game Board, two score sheets and two sets of cards (different colour borders).
- 2. Work with your partners to make two teams of two.
- 3. Each pair takes a set of cards and a score sheet.
- 4. Teams shuffle their cards and place them in a pile facing down.
- 5. Take it in turn to turn over your top card and decide where to put it on the board.
- 6. Each time you get four in a row diagonally, vertically or horizontally you can add a tick to your score sheet. Once a row is found remove all cards and start again.
- 7. The first pair to fill all the boxes on their score sheet win the game.

#### **Learning Outcomes:**

Pupils will know if the angles they see are more or less than obtuse, acute, reflex, right angles or straight line angles.

If you have found further learning outcomes please share them by emailing collaborate@mantralingua.com.

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(You can purchase a professionally printed, sound-enabled version of this activity with pre-cut cards from www.mantralingua.com. Students can use PENpal to record and re-record aurally onto the pages and cards. Recordings can be saved and used for assessment, or shared with other classes and schools via "ShareLINK".)



# How to play Save Angle Forest Connect Four

You are Angle Forest's magical creatures. Builders ar tearing down your home to build a new shopping centre. Find a row of angles to save part of your home.

- 1. You need four players, one game board, two score sheets and two sets of cards (different colour borders.)
- Work with your partners to make two teams of two.
- 3. Your team should take the cards with blue borders.
- 4. Shuffle your cards and place them in a pile facing down.5. Take it in turn to turn over
- your top card and decide where to put it on the board.

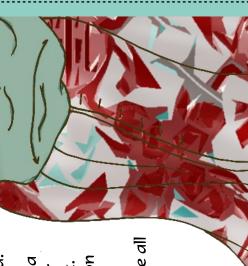
  6. Every time you get four in a row diagonally, vertically or horizontally you get a point.

  Make a note of this. point on the score sheet.
- Once a row is found remove all cards and start again.



You are Angle Forest's magical creatures. Builders are tearing down your home to build a new shopping centre. Find a row of angles to save part of your home.

- 1. You need four players, one game board, two score sheets and two sets of cards (different colour borders.)
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- 4. Shuffle your cards and place them in a pile facing down.
- 5. Take it in turn to turn over your top card and decide where to put it on the board.
- 6. Every time you get four in a row diagonally, vertically or horizontally you get a point. Make a note of this. point on the score sheet.
- Once a row is found remove all cards and start again.



You are the Builders hired to build a shopping centre, and to tear down Angle Forest. You will not be paid if

Save Angle Forest Connect Four How to play

you do not do your job. Find a row of angles to tear

down part of the Forest.

1. You need four players, one game board, two score sheets

and two sets of cards (different colour borders.)

Work with your partners to

5

nake two teams of two.

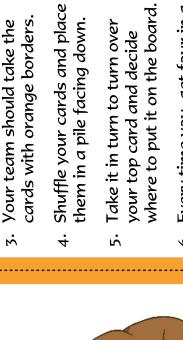
# Save Angle Forest Connect Four How to play

You are the Builders hired to build a shopping centre, and to tear down Angle Forest. You will not be paid if you do not do your job. Find a row of angles to tear down part of the Forest.

- 1. You need four players, one game board, two score sheets and two sets of cards (different colour borders.
- Work with your partners to make two teams of two.
- cards with orange borders. Your team should take the 3
- Shuffle your cards and place them in a pile facing down.
  - where to put it on the board. Every time you get four in a row diagonally, vertically or Take it in turn to turn over your top card and decide Ÿ ٠.
    - Make a note of this point on horizontally you get a point. the score sheet.
- Once a row is found remove all cards and start again.



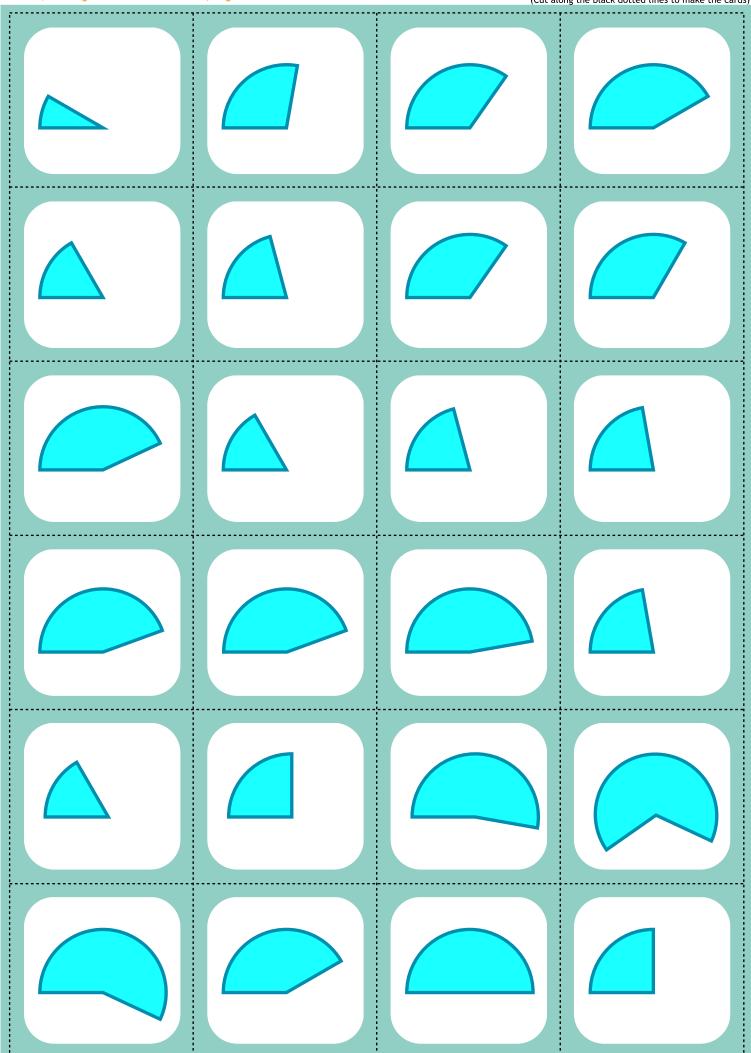


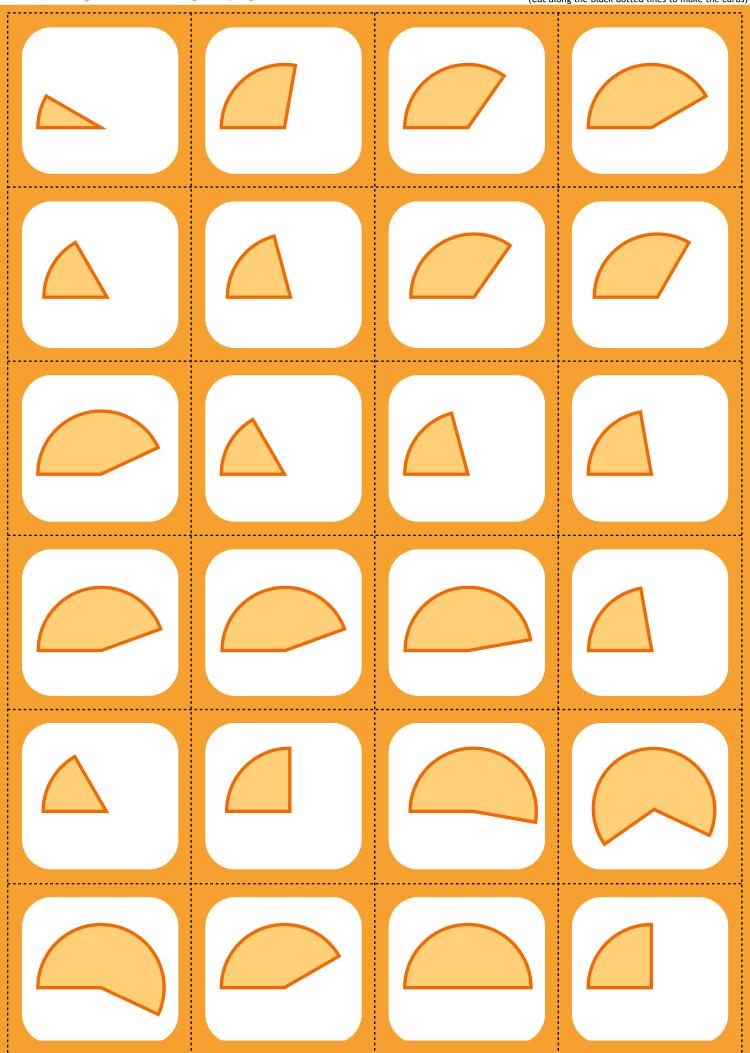


Every time you get four in a horizontally you get a point. Make a note of this point on row diagonally, vertically or the score sheet. ٠.

Once a row is found remove all cards and start again. <u>.</u>







#### Creatures' Score Sheet

Simply tick a red box every time you complete a row and read the text to the right. The first to receive 5 ticks wins.

Old Chou, the wise magician of the woodland critters, creates a spell to make the builders ill. Row 1 They have to call in sick and can't work. One part of Angle Forest is saved. Some of the mischievous woodland critters mix the builders' maps up. The builders get Row 2 lost in the forest. They spend so long trying to find their way that they have no time to build. Another part of Angle Forest is saved. Old Chou is very good at controlling the weather to ensure there is enough rain and sun to allow Angle Forest to thrive. He creates Row 3 a huge storm. The builders can't build in the torrential rain. A third part of Angle Forest is saved. Woodland critters are very good at mimicking animal noises. They stand at the edge of the forest, out of sight, and all growl like bears. Row 4 The builders are so afraid they refuse to enter Angle Forest. Another part of Angle Forest is saved. THE FOREST IS SAVED! All the hard work has paid off! The builders have done so little work that they have been fired by the construction company. The Row 5 company has wasted so much money they can

no longer afford to build the shopping centre.

Angle Forest is saved, and the woodland critters can enjoy their beautiful home.

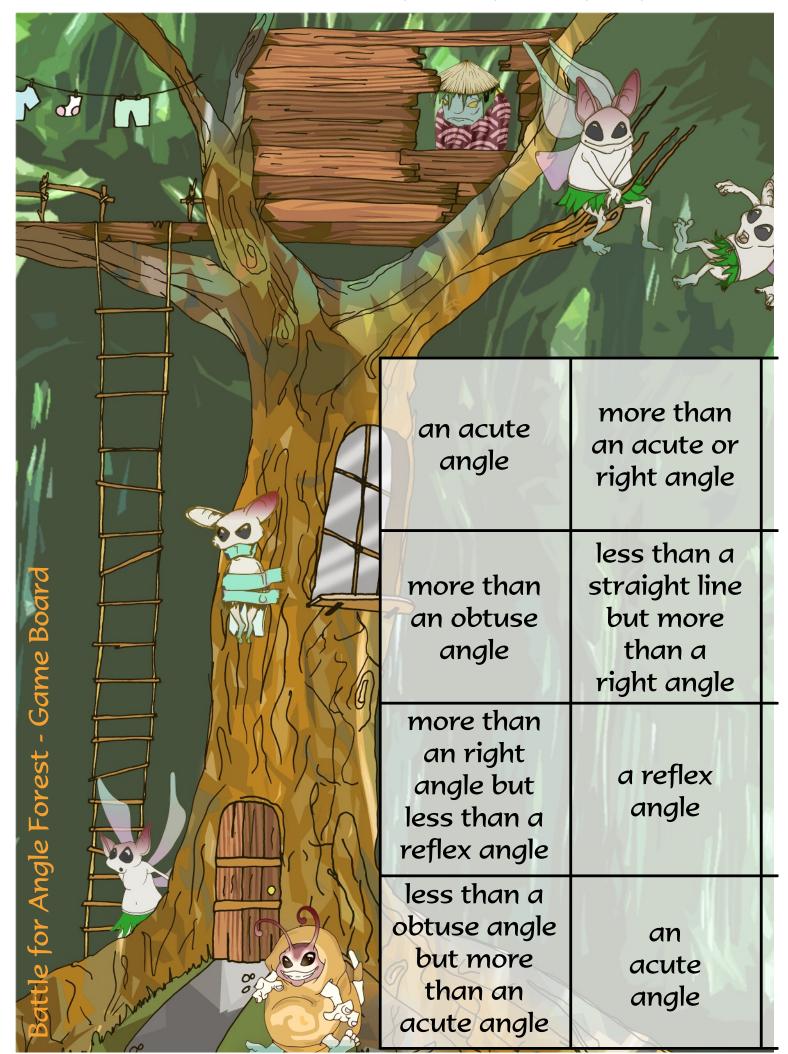
#### Builders' Score Sheet

Simply tick a red box every time you complete a row, read the text to the right. The first to receive 5 ticks wins.

It's the builders first day at Angle Forest. The sun is shining and spirits are high. They get a Row 1 lot of work done and are able to go home early. The first part of Angle Forest has been destroyed. It's one of the builder's birthday, someone brings in lots of cakes and they are all very Row 2 happy. A happy building team means work progresses quickly. A second part of Angle Forest is destroyed. The builders are doing so well that the construction company offer them a bonus if Row 3 they can finish by the end of the week. They work extra hard. Another part of Angle Forest is destroyed. To ensure that the builders finish by the end of the week, the construction company buys them new power tools. These new tools Row 4 make their job much easier. They manage to destroy a fourth part of Angle Forest. THE FOREST IS GONE! The builders' hard work has paid off. They have all worked so hard and fast that they receive a bonus from the construction Row 5 company. Angle Forest is gone and they all have brand new power tools to help build the shopping

centre on the barren land.

Congratulations.



## Battle for Angle Forest Game Board



1/2			
less than a reflex angle	more than a straight line	an obtuse angle	an acute angle
less than a right angle	a reflex angle	less than an obtuse or a right angle	more than an obtuse angle or a straight line
an obtuse angle	less than an obtuse angle	an obtuse angle	less than a reflex angle
less than a reflex angle but more than an obtuse angle	less than a reflex angle or straight line but more than a right angle	less than a right angle	a right angle