Mathematics Department Workshops
Topic: Place Value
Resource Sheet HT2.PLV.5

Hexagonal jigsaw

Make a set of cards from the statements below.
Group the learners into pairs or small groups.
Ask the learners take each card in turn and discuss amongst themselves the numbers for which the statement is true and when it is false.
Suggest that the learners test whether or not the statements are true for 0.
Ask learners to place the cards on to a poster and describe the set of values for which the statement is true. Encourage learners to make their set as large as possible.
To complete the activity learners create their own statements for other groups to find examples that confirm or deny the statements.

Dividing a number by 10 always makes it smaller	Dividing a number by 10^2 always makes a number smaller.
Dividing a number by 0.1 always makes a number smaller.	Dividing a number by 10^0 always makes a number bigger.
Multiplying a number by 10^0 always makes a number bigger.	Multiplying a number by 10^2 always makes a number bigger
Dividing a number by 0.01 always makes a number bigger	Dividing a number by 0.01 always makes a number smaller
Multiplying a number by 0.1 is the same as multiplying by 10^{-1}	Multiplying a number by 0.01 always makes a number smaller
	Multiplying a number by 100 always makes a number bigger

In reviewing the activity you might ask learners to consider whether the statements are true for negative numbers as well, if this point hasn't already been raised.