

# *Malati*

*Mathematics learning and teaching initiative*

## **Geometry**

### **Module 5**

## **2-Dimensional Figures**

### **Grades 4 to 7**

## **Teacher document**

Malati staff involved in developing these materials:

Kate Bennie  
Zonia Jooste  
Dumisani Mdlalose  
Rolene Liebenberg  
Piet Human  
Sarie Smit

We acknowledge the contribution of Zain Davis, Shaheeda Jaffer, Mthunzi Nxawe and Raymond Smith in shaping our perspectives.

#### **COPYRIGHT**

All the materials developed by MALATI are in the public domain. They may be freely used and adapted, with acknowledgement to MALATI and the Open Society Foundation for South Africa.

December 1999

## Introduction to Module 5

This Module focuses on two-dimensional figures and transformations (motion). The initial activities make use of pictures of everyday objects to informally develop ideas on symmetry and transformations. In the latter activities the geometric figures are the focus.

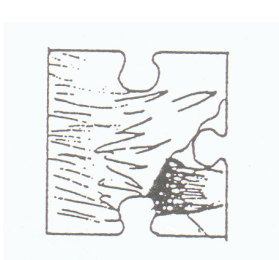
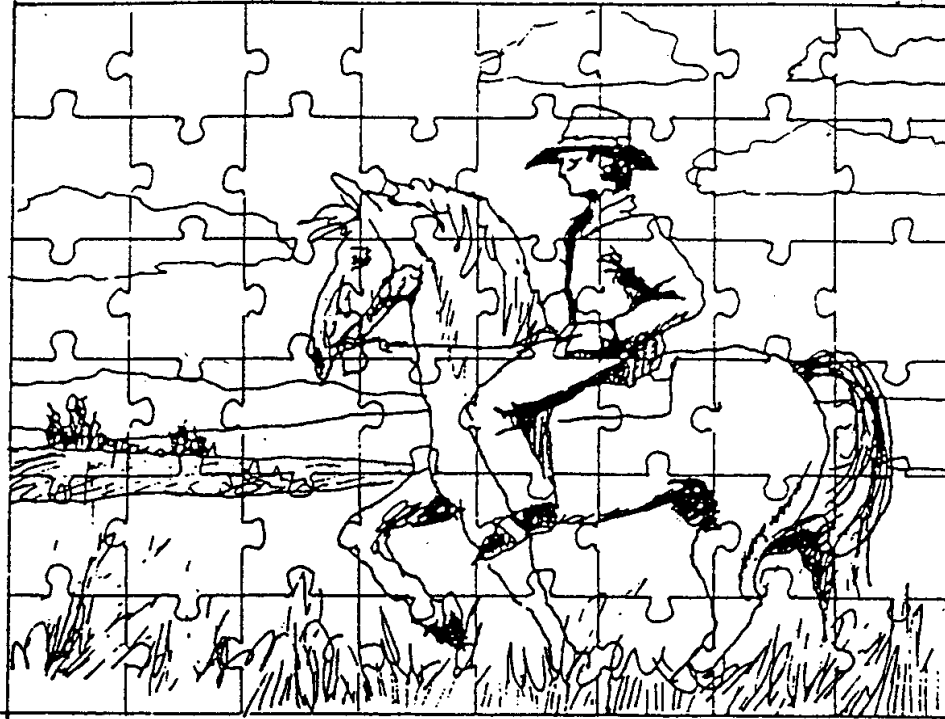
It is important to note that the same activity can be used for learners on the [van Hiele](#) visual or analysis level. Ideas on the different uses of these activities are provided in the teacher notes.

A number of activities require the use of the figures in the “Figure Sheet”. Each learner should have one set of the figures – these should preferably be made of cardboard so that learners can trace around them when making patterns. Each learner will also require a copy of the tangram. Before using the figures for the given activities the teacher can require that learners identify and name each figure.

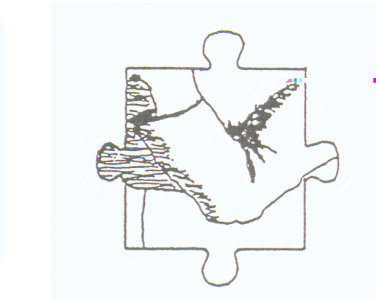
# On the Farm

Where do the puzzle pieces fit in this picture?

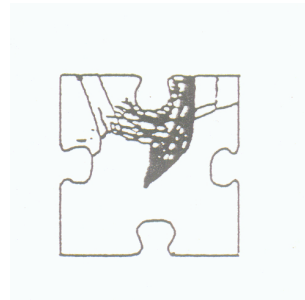
In each case write the number of the correct puzzle pieces in the space you have chosen.



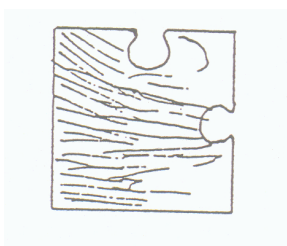
A.



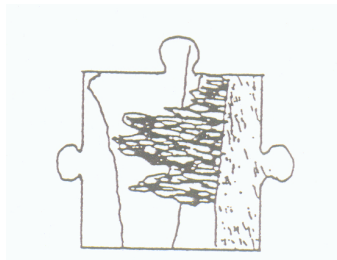
B.



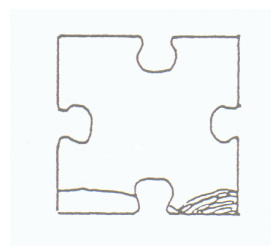
C.



D.



E.



F.

**Teacher Notes: On the Farm ...**

*This activity requires that mentally manipulate the pieces of the puzzle. Some learners might need to cut and rotate the pieces.*

*The individual puzzle pieces A to F have deliberately been drawn larger than Learners should not have a problem with the fact that the pieces are smaller than the those in the actual puzzle – some learners might find this difficult.*

*Learners may start with the edge pieces, because they might be more easily recognisable.*

*Further Activities:*

*Teachers can make their own puzzle activities. If these are in colour, pupils might find it helpful to match colours.*

**CONTINUE TO MODULE 5B**