

# MAMMALS

- 1 You are going to observe and draw one of your fingers.
  - (a) Place the palm of your hand on the paper.  
Examine one finger.

Make a large, labelled drawing of this finger.

[4]

(b) Fig. 2.1 shows the European mole, *Talpa europa*.



Fig. 2.1

(i) State **one similarity, visible** in Fig. 2.1, between the structure of the mole's hand and your hand.

.....  
 ..... [1]

(ii) Complete Table 2.1 to state **two differences, visible** in Fig. 2.1 between the shape and size of the mole's hand and your hand.

feature	mole's hand	your hand
shape		
size		

[2]

(c) (i) Name the group of vertebrates to which the mole belongs.

..... [1]

(ii) State **one feature, visible** in Fig. 2.1, that supports your answer to (c)(i).

.....  
 ..... [1]

[Total: 9]

**MARKING SCHEME:**

(a)	<p>Outline - clear unbroken lines and no shading;</p> <p>Size - occupies at least half the space up to [4] mark allocation;</p> <p>Detail - nail, hair, cuticle, wrinkle, joint; [this a drawing mark]</p> <p>Label – any <b>one</b> of detail features;</p>	[4]	<p><b>Ignore</b> extra part fingers or hand.</p> <p>Size should be at least 63mm or larger. <b>Use the measuring tool on screen.</b></p> <p>at least <b>2</b> details drawn for 1 mark <b>allow</b> nail bed / cuticle / scars / freckles / mole / blood vessel. if drawn from palm view allow fingerprint as one detail.</p> <p><b>Ignore</b> incorrect labels.</p>												
(b) (i)	<p>similarity – (both) <b>5</b> digits / fingers / nail / claws / toes;</p>	[1]	<p><b>Allow</b> fingers with 2 joints / 3 sections / palm. <b>Allow</b> 4 fingers and a thumb</p>												
(ii)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"><i>feature</i></th> <th style="width: 35%;"><i>mole's hand</i></th> <th style="width: 35%;"><i>your hand</i></th> </tr> </thead> <tbody> <tr> <td><i>shape</i></td> <td>thick / fat / chubby wide / broad round / circular</td> <td>thin / long / narrow / oval / rectangular;</td> </tr> <tr> <td><b>and</b></td> <td></td> <td></td> </tr> <tr> <td><i>size</i></td> <td>small / 18–20 mm large in proportion to body short / small fingers</td> <td>large / 140–200 mm; small in proportion to body ; long / large fingers;</td> </tr> </tbody> </table>	<i>feature</i>	<i>mole's hand</i>	<i>your hand</i>	<i>shape</i>	thick / fat / chubby wide / broad round / circular	thin / long / narrow / oval / rectangular;	<b>and</b>			<i>size</i>	small / 18–20 mm large in proportion to body short / small fingers	large / 140–200 mm; small in proportion to body ; long / large fingers;	Max [2]	<p>Mark whole table together</p> <p>Give two marks for any two comparisons. If one box completed with comparative term eg accept broader</p> <p>Accept any idea that proportionally the mole <b>fingers</b> are short in relation to palm of hand / <b>ORA</b>. Ignore reference to hairs.</p>
<i>feature</i>	<i>mole's hand</i>	<i>your hand</i>													
<i>shape</i>	thick / fat / chubby wide / broad round / circular	thin / long / narrow / oval / rectangular;													
<b>and</b>															
<i>size</i>	small / 18–20 mm large in proportion to body short / small fingers	large / 140–200 mm; small in proportion to body ; long / large fingers;													
(c) (i)	<p>mammals / mammalia;</p>	[1]													
(ii)	<p>hairs / fur / whiskers / bristles / <b>AW</b>;</p>	[1]	<p>Accept visible features only. Ignore incorrect features.</p>												
		<b>[Total: 9]</b>													