

# Grade 8 Technology Worksheet

---

## Linked levers

### 1.1 Capability task – Group task

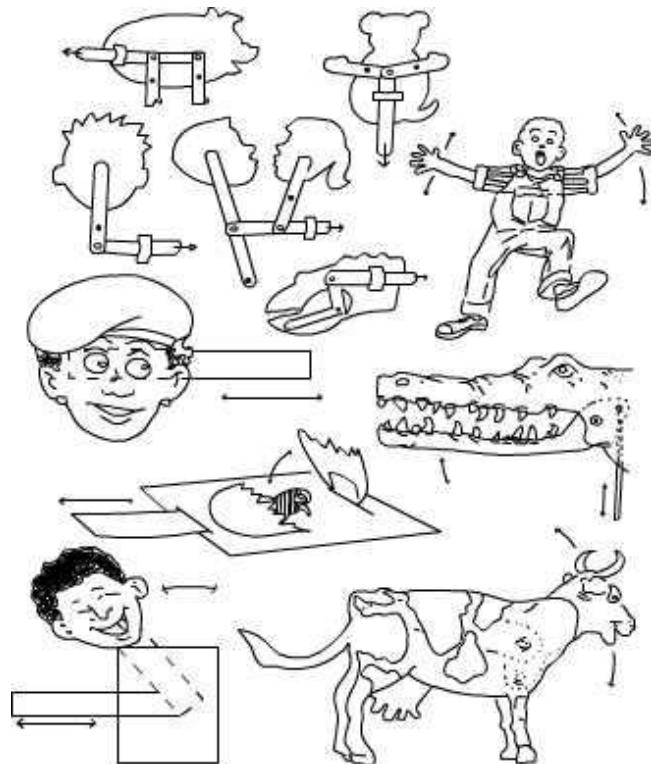
#### ***Design brief***

Design and make a personal storybook for a preschool pupil, using a system of levers and linked levers to create a pop-up effect with characters / scenes.

#### ***Design specifications:***

- 1) Use strong durable corrugated cardboard to construct your book.
- 2) It must be of a suitable size for a preschool pupil to carry around.
- 3) Use bright colors and illustrations to make the book attractive.
- 4) The book must be neatly made and finished.
- 5) The book must demonstrate the use of levers.
- 6) Levers must be joined with split pins which must be securely attached for safe use by the child.
- 7) It must be user-friendly.

N.B. Revise the work on linked levers from Grade 7. The following diagrams may help you.



## Grade 8 Technology Worksheet

---

Complete the following self-evaluation rubric once you have finished your work.

Task _____	Group members _____			
Criteria	1	2	3	4
	Need help	Average	Good	Excellent
1) I worked well in the group.				
2) I shared ideas and contributed to the project.				
3) I helped to plan the work.				
4) The book was neatly made and finished.				
5) The book contained a system of levers.				
6) The levers were neatly made and securely attached to the book.				
7) The book was attractive and appealing to a child.				
8) The book is durable and user-friendly.				

## Grade 8 Technology Worksheet

---

1.2 Compile a project portfolio in which you show all the technological steps necessary to complete the project. You will be assessed as follows:

	Possible mark	Your mark
<b>Cover page and presentation</b> Must be neatly written and show effort. Include title of project, both names, class, year.	10	
<b>Pair</b> Design brief Specifications and constraints	5 5	
<b>Individual</b> Each group member to have two rough ideas, including labels. 3-D view	15 10	
<b>Pair</b> Chosen design and reason for choice	10	
<b>Evaluation</b> Preparation Workstation and order Co-operation Time management	5 5 5 5	
	<b>TOTAL 75</b>	

[75 marks]

# Grade 8 Technology Worksheet

---

## Suggested Solutions

Question number	Possible marks	Answers
1	75 marks	1.1 Self-assessment. 1.2 Complete assessment rubric.

[75 marks]

## Appendix of Assessment Tools

### 1.1 Capability task – Self-evaluation rubric

Task _____	Group members _____			
Criteria	1	2	3	4
1) I worked well in the group.				
2) I shared ideas and contributed to the project.				
3) I helped to plan the work.				
4) The book was neatly made and finished.				
5) The book contained a system of levers.				
6) The levers were neatly made and securely attached to the book.				
7) The book was attractive and appealing to a child.				
8) The book is durable and user-friendly.				

# Grade 8 Technology Worksheet

---

## 1.2 Project portfolio assessment

	Possible mark	Your mark
<b>Cover page and presentation</b> Must be neatly written and show effort. Include title of project, both names, class, year.	10	
<b>Pair</b> Design brief Specifications and constraints	5 5	
<b>Individual</b> Each group member to have two rough ideas, including labels. 3-D view	15 10	
<b>Pair</b> Chosen design and reason for choice	10	
<b>Evaluation</b> Preparation Workstation and order Co-operation Time management	5 5 5 5	
	<b>TOTAL 75</b>	