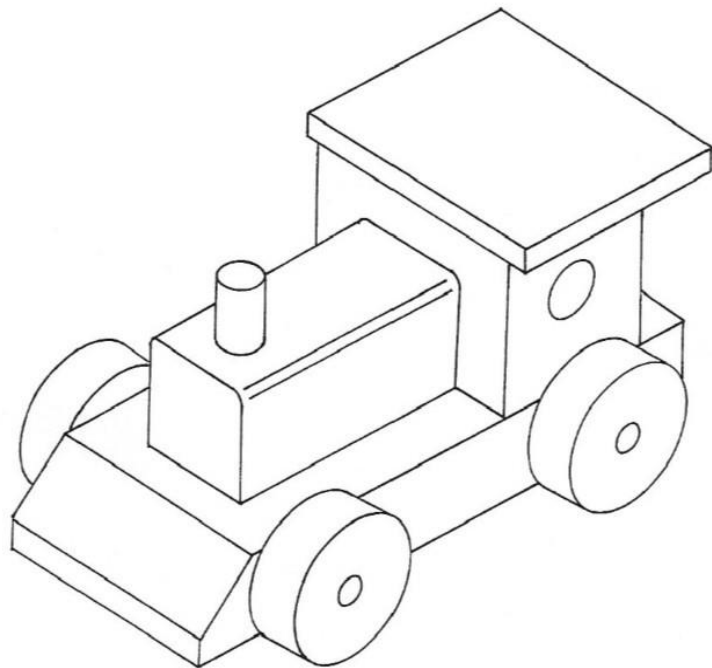


The Elementary Woodshop

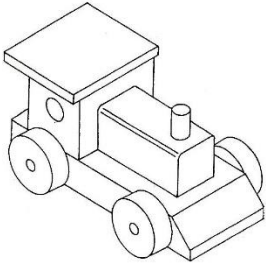
Applied Design, Skills and Technologies

Reference Guide for Teachers

LOCOMOTIVE



Recommended Reading Prior to Beginning Workbook and Assembly



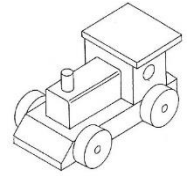
Locomotive Reference Guide for Teachers

For a successful experience in your classroom it is recommended that you work through the accompanying Workbook and this Reference Guide prior to presenting the project to students.

As you work through the Workbook, it would be beneficial to assemble the woodwork project so you are better equipped to teach the assembly to your students. You may temporarily hold the wood pieces together using masking tape rather than glue which is required for permanent assembly with this woodwork project. The recommended drying time for wood glue is a minimum of 30 minutes.

A hammer is required for this project. As wood may splinter it is advisable to handle wood with care and have tweezers available in case of slivers.

Locomotive Reference Guide for Teachers



Section 1 Math

Shapes

Page 2

2. **Cube**
4. **Cylinder**

Measuring

Page 3

***NOTE TO TEACHER** – *Distribute locomotive parts to students.*

2. **Rectangle**
3. **13 cm long**
5 cm wide

Page 4

5. **Rectangle**
6. **6 cm**
7. **5 cm**

Page 5

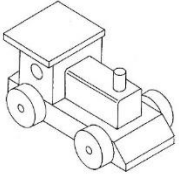
9. **Circle**
10. **3 cm**

Section 2 Materials Technology

Wood Technology

Page 7

1. **Light tan, Yes**

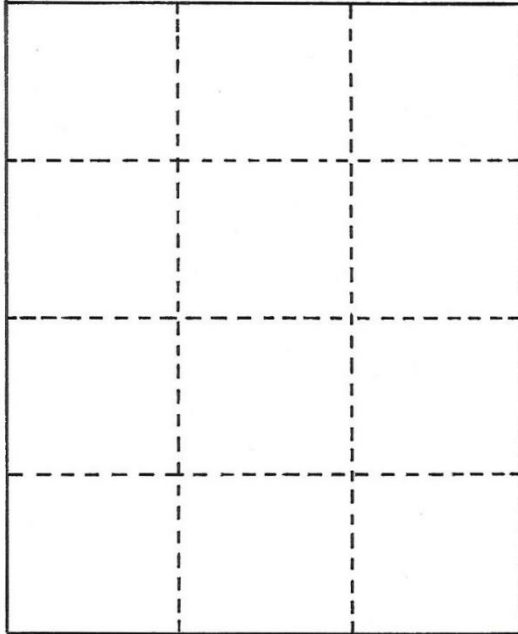


Locomotive Reference Guide for Teachers

Section 3 Assembly

Page 10

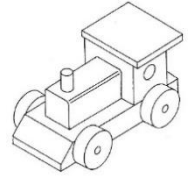
Mark and cut sandpaper as in diagram to fit sanding blocks:



***NOTE TO TEACHER** – *Distribute sanding blocks and pre-cut coarse and medium sandpaper.*

Discuss different grits of sand with students. Larger grit is used first on rough wood; smaller grit is used for smooth finishing.

Locomotive Reference Guide for Teachers



Page 15

*** NOTE TO TEACHER** – *Distribute plastic eyes for students to apply to locomotives.*

Have students mark location of eyes with a pencil on the front of the locomotive boiler. Have students apply a very small drop of glue with a toothpick to the back of each eye and place on boiler.

Section 4 Drawing

Page 25

Lesson Enhancement Recommendations

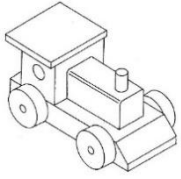
- Create a classroom frieze from a copy of each student's train car design.
- Students may use their designs to build train cars from materials such as cardboard, Styrofoam, recycled containers. Buttons may be used to represent wheels.

Section 5 Creative Writing

Page 26

Lesson Enhancement Recommendation

Present a video in class of a popular TV cartoon of a locomotive character before students begin their creative writing project.



Locomotive Reference Guide for Teachers

Section 6 Transportation

Page 27

| Form of Transportation | Powered By | Water, Land or Air |
|------------------------|-------------------------------------|--------------------|
| Sailboat | Air | Water |
| Bicycle | Human | Land |
| Canoe | Human | Water |
| Covered Wagon | Horse | Land |
| Float Plane | Gasoline Engine | Air |
| Helicopter | Gasoline Engine | Air |
| Hybrid Car | Electric Motor / Gasoline Engine | Land |

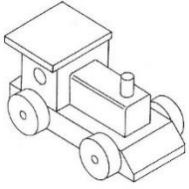
Traditional Aboriginal Perspectives and Knowledge of the Canoe

Section 6 (Pages 30-31) offers an overview of traditional Aboriginal perspectives and knowledge of the canoe as a form of transportation on the west coast of British Columbia. This may be an opportunity for your students to learn about traditional transportation methods in your local area.

Page 31

Food, Tools, Clothing, Furs

Rivers, Lakes



Locomotive Reference Guide for Teachers

References

Stewart, H. (1984) *Cedar: Tree of Life to the Northwest Coast Indian*
Vancouver/Toronto: Douglas & McIntyre

Province of BC Ministry of Education New Curriculum Building Student
Success <https://curriculum.gov.bc.ca/>

Industry Training Authority <http://www.itabc.ca/>

Cedar: A Journey into Time Memorial. SFU Museum of Archaeology and
Ethnology www.sfu.museum/time/en/panoramas/beach/cedar/

Importance of Cedar. - SFU Museum of Archaeology and Ethnology
www.sfu.museum/time/en/videos/13/

Northwest Coast Canoes – Simon Fraser University – The Bill Reid Centre
https://www.sfu.ca/brc/art_architecture/canoes.html

Aboriginal Perspectives and Knowledge content was reviewed by
Carrie Reid, Indigenous Education Resource Teacher

Illustrations by Peter Farkas, B.Ed. and Dale Schulz, DaschStudio