Handsworth Grange
Community Sports College

YEAR 9 KS3 PRODUCT DESIGN LEARNING JOURNEY

Mini NEA Product Design Lamp

Lesson 1

Recap:
Recall links to y7 and y8
Health and Safety In the workshop
and Industry expectations

Core Knowledge:
Basic electronics
Links to science curriculum

Analysis:
product analysis using
ACCESSFM

Lesson 2

Research:
Client needs. Client profile

Design:
Designing with influence
from other designers

Model development:
Sketch modelling
Scissors, tape, hot glue, card.

Lesson 3

Core Knowledge:
Being a responsible designer, product
lifecycle, end of life.
Recall links to y7 knowledge
Production methods and Globalization

Model development:
continued

Analysis:
product analysis of sketch
models using ACCESSFM

Homework: Microsoft forms Quiz

Lesson 4

Make:
developing final idea through
final prototyping

Core Knowledge:
Basic modelling Materials papers and boards.
Recall y7 knowledge material properties

Lesson 5

Core Knowledge:
CAD

Make:
CAD modelling

Test:
Assessment on knowledge learnt throughout
the project using Microsoft quiz/forms

Lesson 6

★★★

Evaluate:
What went well. How can you
improve your skills?

Make:
Quality Control
Final improvements with influence
from other designers

Pride:
Improvements from test

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YEAR 8 KS3 PRODUCT DESIGN LEARNING JOURNEY

Engineering problem solving & development

Lesson 1

Recap:
Health and Safety In the workshop and Industry expectations
Recall links to y7

Core Knowledge/skill:
Analysing an existing product

Problem solving:
Improving the existing product

Lesson 2

Product development: Use:
Production aids and proprietary/ product specific components

Design:
Form over Function

Research/recall y7:
Client needs. Client profile

Lesson 3

Choice of materials: product Metal/plastic focus Recall y7:
What properties do different materials have?

Product development:
Use of hand tools and basic machinery

Analysis:
product analysis of product at this stage (observation/dimension s and tolerance)

Homework: Microsoft forms Quiz

Lesson 4

Product development:
Use of hand tools and basic machinery

Engineering processes:
Forming processes

Lesson 5

Test:
Assessment on knowledge learnt throughout the project using Microsoft quiz/forms

Engineering processes:
Joining processes

Lesson 6

Evaluate:
What went well. How can you improve your skills?

Make:
Quality Control
Final improvements

Pride:
Improvements from test

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YEAR 7 KS3 PRODUCT DESIGN LEARNING JOURNEY

Photo Frame

Lesson 1

Introduction to the workshop:
Health and Safety

Make:
Coping saw/MDF
Belt Sander
Skills test

Lesson 2

Design:
Designing through hand drawing

Research:
Client needs.

Make:
Coping saw/MDF
Skills test completed

Lesson 3

Core Knowledge:
Production methods and Globalization

Make:
Marking out Templates
Photo frame

Homework: Microsoft forms Quiz

Lesson 4

Make:
Sanding and Starting decoration

Properties of materials:
What properties do different materials have?

Core Knowledge:
Basic Materials groups

Lesson 5

Core Knowledge:
Adhesives
H&S COSHH

Make:
Stand Plywood

Test:
Assessment on knowledge learnt throughout the project

Lesson 6

Evaluate:
What went well. How can you improve your skills?

Make:
Quality Control
Final improvements

Pride:
Improvements from test