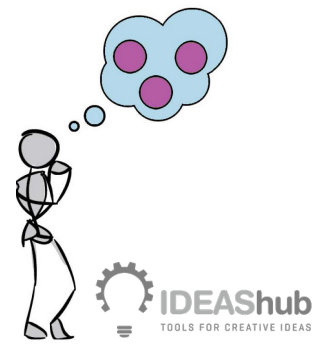


46 Design Heuristics
Creativity Unfolded



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In collaboration with
Design Heuristics, USA

Funded by: IRISH RESEARCH COUNCIL
in partnership with Technological University Dublin

REDUCE MATERIAL

Use less material.

DH53

USE PACKAGING AS A FUNCTIONAL COMPONENT

Make use of the packaging in the design.

DH73

USE REPURPOSED OR RECYCLED MATERIALS

Give old, used or waste material(s) another use.

DH74

ADD NATURAL FEATURES

Include something from nature.

DH3

ANIMATE

Add life-like features to the design.

DH12

INCORPORATE ENVIRONMENT

Include what is around you in the design.

DH39

MIMIC NATURAL MECHANISMS

Copy or mimic nature's processes.

DH46

Guidelines for use:

Use any aspect of the handout, such as:

- Heuristic title
- Images
- Description

- To generate or inspire an idea
- Transform an idea by applying a design heuristic to an existing idea
- Develop part of an idea by applying a design heuristic to a part of an idea

CHANGE SURFACE PROPERTIES

Change the material on the surface.

DH22

COVER OR WRAP

Add an external layer.

DH27

SCALE UP OR DOWN

Make the design available in smaller or larger sizes.

DH58

STACK

Enable the different parts or designs to be stacked.

DH62

TWIST

Twist or turn a part of the design.

DH66

USE MULTIPLE COMPONENTS FOR ONE FUNCTION

Allow different parts to serve one use.

DH72

ADD LEVELS

Change the levels or heights in the design.

DH1

ADD TO EXISTING PRODUCT

Join your design to something that already exists.

DH4

BEND

Change the design by folding or bending.

DH16

CHANGE FLEXIBILITY

Change the design so it has more or less movement.

DH19

EXPAND OR COLLAPSE

Change the design so it is bigger or smaller.

DH32

FLATTEN

Level or even out a part of your design.

DH35

MERGE SURFACES

Change the design by joining surfaces.

DH45

SIMPLIFY

Keep it simple. Remove the unnecessary frills.

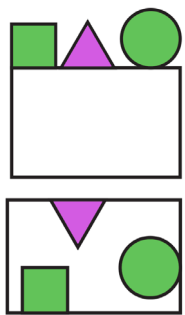
DH60

CHANGE GEOMETRY

Change the shape or form of the design.

DH20

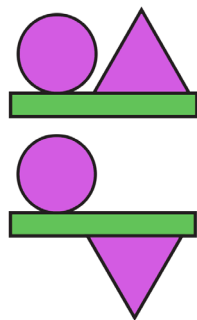
UTILISE INNER SPACE



Use the inside of the design for something.

DH75

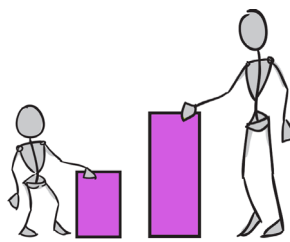
UTILISE OPPOSITE SURFACE



Use another side or surface.

DH76

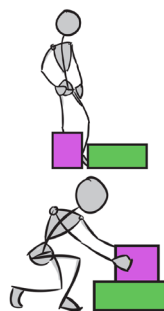
ADJUST FUNCTIONS FOR SPECIFIC USERS



Change the design based on the needs of the user.

DH6

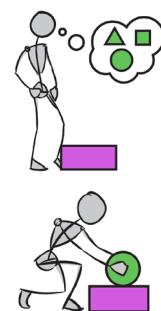
ALLOW USER TO ASSEMBLE



Enable the user to put the design together.

DH8

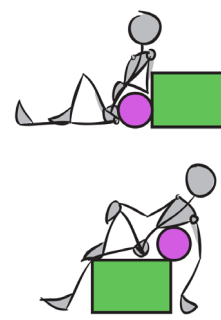
ALLOW USER TO CUSTOMISE



Enable the user to personalise part of the design.

DH9

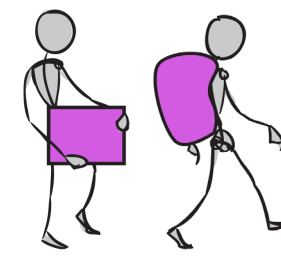
ALLOW USER TO REARRANGE



Enable the user to move or rearrange parts of the design.

DH10

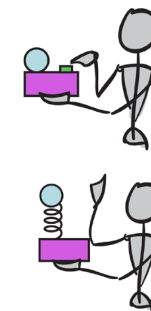
ATTACH PRODUCT TO USER



Join the design to the user.

DH15

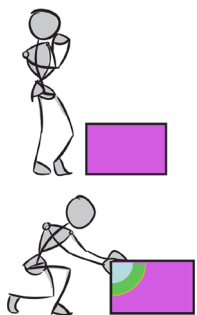
INCORPORATE USER INPUT



Include the user's wants and wishes.

DH40

PROVIDE SENSORY FEEDBACK



Use the senses to give feedback to the user.

DH50

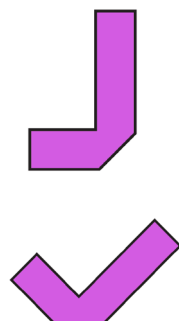
APPLY EXISTING MECHANISM IN A NEW WAY



Use an existing design in a new way.

DH13

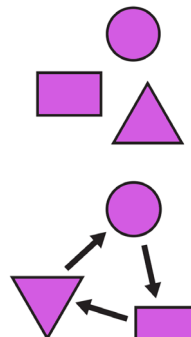
CONVERT FOR SECOND FUNCTION



Change the design so it has more than one use.

DH26

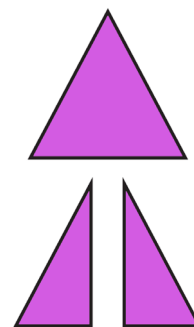
CREATE SYSTEM



Develop a set of designs that work together.

DH29

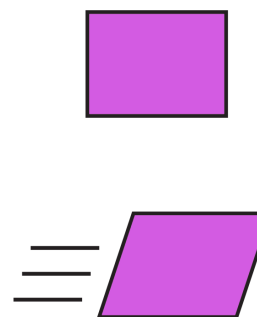
SEPARATE FUNCTIONS



Divide the use(s) of the design.

DH59

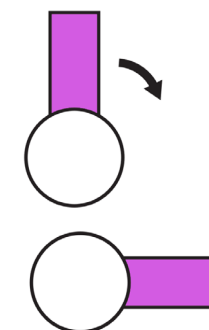
ADD MOTION



Change the design so it moves in some way.

DH2

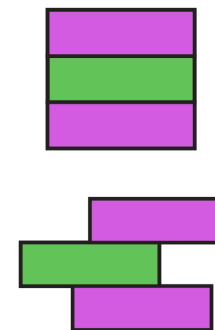
ROTATE



Move part of the design around another part.

DH57

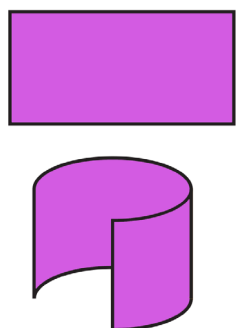
SLIDE



Move one part of the design across another part.

DH61

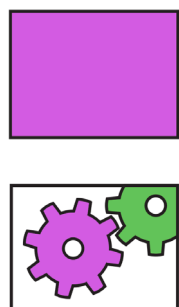
CONVERT 2-D MATERIAL INTO A 3-D OBJECT



Change the design so it could be made from a flat surface.

DH25

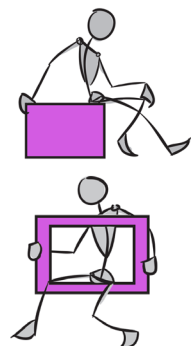
EXPOSE INTERIOR



Change the design to show the inside of the design.

DH33

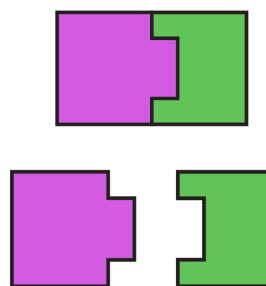
HOLLOW OUT



Remove the inside or interior of the design.

DH37

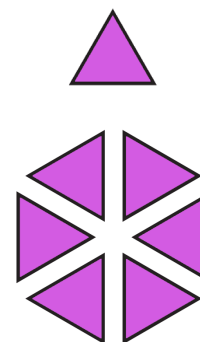
MAKE COMPONENTS ATTACHABLE OR DETACHABLE



Join or take apart the design.

DH42

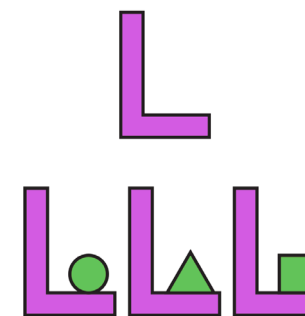
MIRROR OR ARRAY



Start or continue a pattern.

DH47

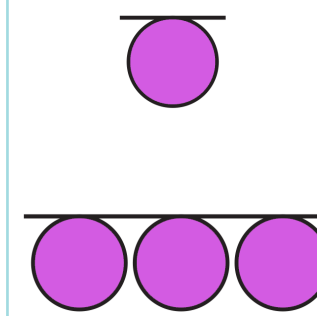
OFFER OPTIONAL COMPONENTS



Allow choice of parts.

DH49

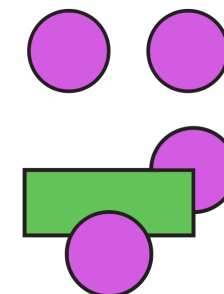
REPEAT



Change the design so a part of the design reoccurs.

DH54

USE COMMON BASE TO HOLD COMPONENTS



Add a base that supports other parts.

DH68