ADVENT TERM  Design Technology – Year 1 - Medium Term Planning – Structure  Design and build a structure			
<u>LESSON 1</u>	LESSON 2	LESSON 3	
LEARNING INTENTION:	LEARNING INTENTION:	LEARNING INTENTION:	
To know that materials have properties which	To know that a shelter is a structure that	To know that design criteria are explicit goals that	
make them fit for different purposes.	provides protection.	a product must achieve.	
Skills:	Skills:		
To name what an object is made from.	To describe and compare two different shelters.	Skills:	
-	·	To create a design that meets specific criteria.	
Aim:	Aim:		
Build and apply a repertoire of knowledge,	Build and apply a repertoire of knowledge,	Aim:	
understanding and skills in order to design and	understanding and skills in order to design and	Build and apply a repertoire of knowledge,	
make high-quality prototypes and products for a	make high-quality prototypes and products for a	understanding and skills in order to design and	
wide range of users.	wide range of users.	make high-quality prototypes and products for a	
		wide range of users.	
Key Vocabulary:	Key Vocabulary:	Key Vocabulary:	
Wood, plastic, glass, metal, water, rock, brick,	Permanent, temporary, shelter, strong, sturdy,	Waterproof, strong, sturdy, materials, fit for	
paper, fabric, materials, properties.	differences.	purpose.	
Recap & retrieval –	Recall & retrieval	Recall & retrieval –	
FS exploration of materials through play.	Different materials have different properties.	Different materials have different properties.	
		A shelter is a structure designed to give protection from	
		weather or danger.	

# Key Knowledge:

### Child:

- Different materials have different properties.
- Some are strong, absorbent, waterproof and transparent, flexible, brittle, etc.

#### Teacher:

- Everyday materials include wood, plastic, glass, metal, water, rock, brick, paper and fabric.
- A material's properties can influence whether it is fit for purpose.

# Key Knowledge:

## Child:

- A shelter is a structure designed to give protection from weather or danger.
- Permanent means that it cannot be moved or taken down.
- Temporary means that it can only stay for a short amount of time.

#### Teacher:

- A bus shelter, office block, garage, carport, tent, bird table, shed, conservatory, house, kennel and caravan are all examples of shelters.
- A shelter can be permanent, like a house or garage, or temporary, like a tent or gazebo.
- Everyday products are objects that are

  used routinely at home and school such

## Key Knowledge:

### Child:

A successful product must match the design criteria.

## Teacher:

- A shelter needs to be waterproof.
- A shelter needs to be strong and sturdy.
- A shelter needs to be the right size for its purpose.

ADVENT TERM			
Design Technology – Year 1 - Medium Term Planning – Structure			
LESSON 4	Design and build a structure  LESSON 5	LESSON 6	
LEARNING INTENTION:	LEARNING INTENTION:	LESSON 6 LEARNING INTENTION:	
To know that the properties of materials impact their effectiveness in different practices.	To know that previous design criteria can be	To know that a product can be improved by using others' ideas.	
Skills: To use a range of materials to build simple structures.  Aim: Develop the creative, technical and practical expertise needed to perform everyday tasks confidently.	Aim: Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a	Skills: To talk about their own and each other's work, identifying strengths or weaknesses and offering support.  Aim: Critique, evaluate and test their ideas and products and the work of others.	
<b>Key Vocabulary:</b> Suitable, sink, purpose, properties, measurements.	Design criteria, analyse, join, fix, collaborate.	<b>Key Vocabulary:</b> Evaluate, improve, positives, negatives, strengths, weaknesses	
<ul> <li>Recall &amp; retrieval</li> <li>Different materials have different properties.</li> <li>A shelter is a structure designed to give protection from weather or danger.</li> <li>A successful product must match the design criteria.</li> </ul>	Pecall & retrieval     Different materials have different properties.     A shelter is a structure designed to give protection from weather or danger.     A successful product must match the design criteria.     Different materials can be used for different purposes, depending on their properties.	<ul> <li>Recall &amp; retrieval</li> <li>Different materials have different properties.</li> <li>A shelter is a structure designed to give protection from weather or danger.</li> <li>A successful product must match the design criteria.</li> <li>Different materials can be used for different purposes, depending on their properties.</li> <li>When designing a product, the choice of materials will affective the outcome of the product.</li> </ul>	
Key Knowledge:	Key Knowledge:	Key Knowledge:	

### Child:

- Different materials can be used for different purposes, depending on their properties.
- A play den is a shelter, usually built outside.
- It is a temporary structure made from found or readily available materials.
- It can be used for imaginative play or to provide protection from the weather.

#### Teacher:

- Cardboard is a stronger building material than paper.
- Plastic is light and can float.
- Clay is heavy and will sink.
- Glass is transparent, so it is suitable to be used for windows.

### Child:

- When designing a product, the choice of materials will affective the outcome of the product.
- Rules are made to keep people safe from danger.

### Teacher:

 Different materials may not be suitable for different products because of their properties.

## Child:

- Testing a product can support the finding of improvements.
- A strength is a good quality of a piece of work.
- A weakness is an area that could be improved.

### Teacher:

- Safety rules include always listening carefully and following instructions, using equipment only as and when directed, wearing protective clothing if appropriate and washing hands before touching food.
- Different materials can be used for different purposes, depending on their properties.

## Assessment

Cumulative quiz. Retrieval practice.