



## Theme 10



# Inventing a Board Game

## National Curriculum

Theme 10 provides opportunities for:

### English

#### Spoken English

##### **KS2, Y5 & Y6**

- listen and respond appropriately to adults and their peers
- articulate and justify answers, arguments and opinions
- give well-structured explanations for different purposes, including for expressing feelings
- maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comments
- use spoken language to develop understanding through speculating, imagining and exploring ideas
- participate in discussions and presentations
- consider and evaluate different viewpoints, attending to and building on the contributions of others

##### **KS 3**

- using Standard English confidently in formal contexts, including classroom discussion
- giving short presentations, expressing their own ideas and keeping to the point

#### Reading Comprehension

##### **KS2, Y5 & Y6**

- continuing to read and discuss non-fiction
- reading for a range of purposes
- retrieve, record and present information from non-fiction

##### **KS3**

- reading a wide range of non-fiction

#### Writing; Composition

##### **KS2, Y5 & Y6**

##### **Planning**

- identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own
- noting and developing initial ideas, drawing on reading and research where necessary

##### **Drafting**

- selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning

##### **Evaluating and Editing**

- assessing the effectiveness of their own and others' writing
- proposing changes to grammar and vocabulary to improve consistency
- ensuring the consistent and correct use of tense throughout a piece of writing

### **KS3**

- writing for a wide range of purposes and audiences, including a range of non-narrative texts
- summarising and organising material
- applying their growing knowledge of vocabulary, grammar and text structure to their writing and selecting the appropriate form

Plan, draft, edit and proof-read through:

- considering how their writing reflects the audiences and purposes for which it was intended
- amending the vocabulary, grammar and structure of their writing to improve its coherence and overall effectiveness

## **Mathematics**

**Fluency:** conceptual understanding; recall and apply knowledge

**Reasoning:** follow lines of enquiry; conjecture relationships and generalisations; develop arguments, justification or proof

**Solving problems:** apply maths to routine and non-routine problems, breaking down into simpler steps

Make connections across different concepts.

Apply mathematical knowledge to other subjects.

### **KS2 Y5-Y6**

- solve a wider range of problems, including increasingly complex properties of numbers and arithmetic, and problems demanding efficient written and mental methods of calculation

#### **Y5 Number; Number and Place Value**

- read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit

#### **Y6 Number; Number and Place Value**

- read, write, order & compare numbers to at least 10 000 000 & determine the value of each digit

#### **Y5 Number; Addition and Subtraction**

- add and subtract numbers mentally with increasingly large numbers

#### **Y6 Number; Addition, Subtraction, Multiplication and Division**

- perform mental calculations, including with mixed operations and large numbers
- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.

### **KS3**

#### **Develop fluency**

- use language and properties precisely to analyse numbers, probability and statistics.

#### **Reason mathematically**

- make and test conjectures about patterns and relationships; look for proofs or counter-examples
- explore what can and cannot be inferred in statistical and probabilistic settings, and begin to express their arguments formally.

#### **Solve problems**

- develop mathematical knowledge, in part through solving problems and evaluating the outcomes, including multi-step problems
- select appropriate concepts, methods and techniques to apply to unfamiliar and non-routine problems.

#### **Number**

- recognise and use relationships between operations including inverse operations

## **Probability**

- record, describe and analyse the frequency of outcomes of simple probability experiments involving randomness, fairness, equally and unequally likely outcomes, using appropriate language and the 0-1 probability scale
- understand that the probabilities of all possible outcomes sum to 1
- generate theoretical sample spaces for single and combined events with equally likely, mutually exclusive outcomes and use these to calculate theoretical probabilities.

## **Art and Design**

- produce creative work, exploring their ideas and recording their experiences
- become proficient in drawing, painting, sculpture and other art, craft and design techniques
- evaluate and analyse creative works using the language of art, craft and design

### **KS2**

Pupils should be taught:

- to develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design.
- to improve their mastery of art and design techniques, including drawing and painting with a range of materials [for example, pencil, charcoal, paint]

### **KS3**

Pupils should be taught:

- to develop their creativity and ideas, and increase proficiency in their execution. They should develop a critical understanding of artists, architects and designers, expressing reasoned judgements that can inform their own work.
- to use a range of techniques and media, including painting
- to increase their proficiency in the handling of different materials
- to analyse and evaluate their own work, and that of others, in order to strengthen the visual impact or applications of their work

## **Design and Technology**

- build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- critique, evaluate and test their ideas and products and the work of others

### **KS2**

- They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

### *Design*

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- generate, develop, model and communicate their ideas through discussion, annotated sketches

### *Make*

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to functional properties and aesthetic qualities

### *Evaluate*

- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work

### **KS3**

They should work in a range of domestic and local contexts [e.g., the home, health, leisure and culture], and industrial contexts [e.g., engineering, manufacturing, construction, food, energy, agriculture (including horticulture) and fashion].

#### *Design*

- use research and exploration, e.g. the study of different cultures, to identify and understand user needs
- identify and solve their own design problems and understand how to reformulate problems given to them
- develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations
- use a variety of approaches [e.g., biomimicry and user-centred design], to generate creative ideas and avoid stereotypical responses
- develop and communicate design ideas using annotated sketches, detailed plans

#### *Evaluate*

- analyse work of past & present professionals and others to develop and broaden understanding
- test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups

## **History**

to develop understanding of:

- the history of these islands as a coherent, chronological narrative, from the earliest times to the present day
- place, historical context and chronology
- historical concepts such as continuity and change, cause and consequence, similarity, difference and significance, and use them to make connections, draw contrasts, analyse trends
- gain historical perspective by placing their growing knowledge into different contexts
- the connections between local, regional and national history
- the connections between cultural, economic and social history
- the connections between short- and long-term timescales

### **KS2**

- develop a chronologically secure knowledge and understanding of British and local history, establishing clear narratives within and across the periods they study
- note connections, contrasts and trends over time and develop the appropriate use of historical terms
- regularly address and sometimes devise historically valid questions about change, cause, and significance
- construct informed responses that involve thoughtful selection and organisation of relevant historical information
- a local history study

### **KS3**

- extend and deepen chronologically secure knowledge and understanding of British, and local history, so that it provides a well-informed context for wider learning
- identify significant events, make connections, and analyse trends within periods
- use historical terms and concepts in increasingly sophisticated ways
- understand how different types of historical sources are used rigorously to make historical claims
- ideas, political power, industry and empire: Britain, 1745-1901
- society, economy and culture across the period
- a local history study