

# Planning for Learning through Numbers

by Jenni Clarke. Illustrated by Cathy Hughes

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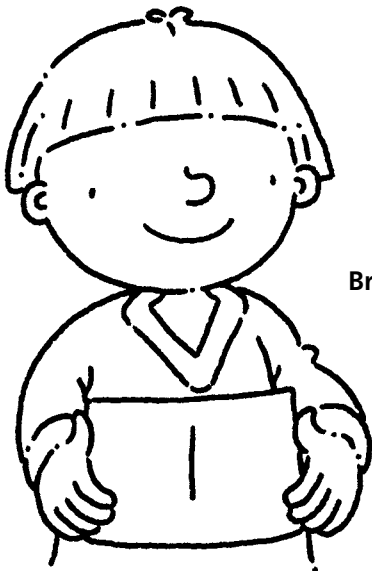
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# Making plans

## Child-friendly planning

The purpose of planning is to make sure that all children enjoy a broad and balanced experience of learning. Planning should be flexible, useful and child-friendly. It should reflect opportunities available both indoors and outside. Plans form part of a planning cycle in which practitioners make observations, assess and plan.

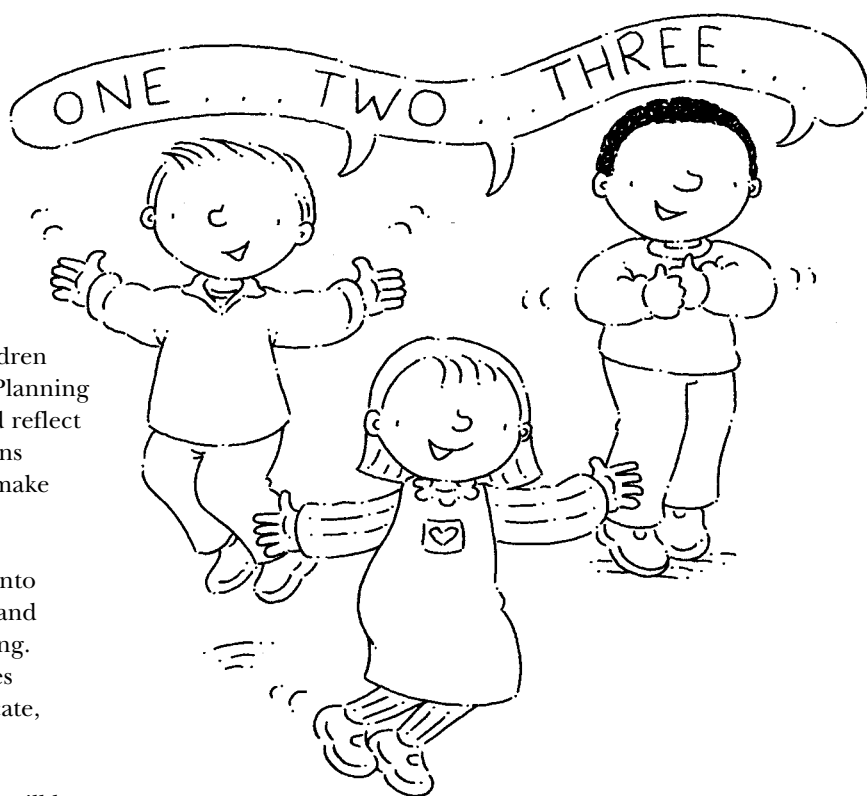
Children benefit from reflective planning that takes into account the children's current interests and abilities and also allows them to take the next steps in their learning. Plans should make provision for activity that promotes learning and a desire to imagine, observe, communicate, experiment, investigate and create.

Plans should include a variety of types of activity. Some will be adult-initiated or adult-led, that focus on key skills or concepts. These should be balanced with opportunities for child-initiated activity where the children take a key role in the planning. In addition there is a need to plan for the on-going continuous provision areas such as construction, sand and water, malleable materials, small world, listening area, role-play and mark-making. Thought also needs to be given to the enhanced provision whereby an extra resource or change may enable further exploration, development and learning.

The outdoor environment provides valuable opportunities for children's learning. It is vital that plans value the use of outdoor space.

## The UK Frameworks

Within the UK a number of frameworks exist to outline the provision that children should be entitled to receive. Whilst a variety of terms and labels are used to describe the Areas of Learning there are key principles which are common to each document. For example they advocate that practitioners' planning should be personal based on observations and knowledge of the specific children within a setting. They acknowledge that young children learn best when there is scope for child-initiated activity. In addition it is accepted that young children's learning is holistic. Although within the documents Areas of Learning are presented separately to ensure that key areas are not over-looked, within settings, children's learning will combine areas. Thus the Areas of Learning are perhaps of most use for planning, assessment and recording.



## Focused area plans

The plans you make for each day will outline areas of continuous provision and focused, adult-led activities. Plans for focused-area activities need to include aspects such as:

- resources needed;
- the way in which you might introduce activities;
- individual needs;
- the organisation of adult help;
- size of the group;
- timing;
- safety;
- key vocabulary.

Identify the learning and the Early Learning Goals that each activity is intended to promote. Make a note of any assessments or observations that you are likely to carry out. After carrying out the activities, make notes on your plans to say what was particularly successful, or any changes you would make another time.

## A final note

Planning should be seen as flexible. Not all groups meet every day, and not all children attend every day. Any part of the plan can be used independently, stretched over a longer period or condensed to meet the needs of any group. You will almost certainly adapt the activities as children

# Making plans

respond to them in different ways and bring their own ideas, interests and enthusiasms. The important thing is to ensure that the children are provided with a varied and enjoyable curriculum that meets their individual developing needs.

## Using the book

Read the section which outlines links to the Early Learning Goals (pages 4-6) and explains the rationale for focusing on 'Numbers'.

The chart on page 7 gives an example format for weekly planning. It provides opportunity to plan for the on-going continuous provision, as well as more focused activities.

Use pages 8 to 19 to select from a wide range of themed, focused activities that recognise the importance of involving children in practical activities and giving them opportunities to follow their own interests. For each 'Numbers' theme, two activities are described in detail as examples to help you in your planning and preparation. Key vocabulary, questions and learning opportunities are identified. Use the activities as a basis to:

- extend current and emerging interests and capabilities
- engage in sustained conversations
- stimulate new interests and skills.

Find out on page 20 how the Numbers activities can be brought together within a 'We Love Numbers Day'.

Use page 21 for ideas of resources to collect or prepare. Remember that the books listed are only suggestions. It is likely that you will already have within your setting a variety of other books that will be equally useful.

The activity overview chart on page 23 can be used either at the planning stage or after each theme has been completed. It will help you to see at a glance which aspects of children's development are being addressed and alert you to the areas which may need greater input in the future.

As children take part in the activities, their learning will progress. 'Collecting evidence' on page 22 explains how you might monitor each child's achievements.

There is additional material to support the working partnership of families and children in the form of a reproducible Family page found inside the back cover.

It is important to appreciate that the ideas presented in this book will only be a part of your planning. Many activities that will be taking place as routine in your group may not be mentioned. For example, it is assumed that sand, dough, water, puzzles, role-play, floor toys, technology and large scale apparatus are part of the ongoing early years experience. Role-play areas, stories, rhymes, singing, and group discussion times are similarly assumed to be happening in each week although they may not be a focus for described activities.

Remember to check children's health records for food allergies/foods they may not eat and, also, your area health and safety guidelines, when planning activities involving food. Ensure the parents are informed in advance. Do not attempt any baking or tasting activity without first obtaining parental consent.



# Using the 'Early Learning Goals'

The principles that are common to each of the United Kingdom curriculum frameworks for the early years are described on page 2. It is vital that, when planning for children within a setting, practitioners are familiar with the relevant framework's content and organisation for areas of learning. Regardless however, of whether a child attends a setting in England, Northern Ireland, Scotland or Wales they have a right to provision for all areas of learning. The children should experience activities which encourage them to develop their communication and language; personal, social, emotional, physical, mathematical and creative skills. They should have opportunities within literacy and be encouraged to understand and explore their world.

Within the Statutory Framework for the Early Years Foundation Stage (2012), Communication and Language; Physical Development and Personal, Social and Emotional Development are described as Prime Areas of Learning that are 'particularly crucial for igniting children's curiosity and enthusiasm for learning, and for building their capacity to learn, form relationships and thrive' (page 4, DfE 2012). The Specific Areas of Learning are Literacy, Mathematics, Understanding the World and Expressive Arts and Design.

For each Area of Learning the Early Learning Goals (ELGs) describe what children are expected to be able to do by the time they enter Year 1. These goals, detailed on pages 4 to 6, have been used throughout this book to show how activities relating to 'Numbers' could link to these expectations. For example, for Personal, Social and Emotional Development, one aim relates to the development of children's 'self-confidence and self-awareness'. Activities suggested which provide the opportunity for children to do this have the reference PSE1. This will enable you to see which parts of the Early Learning Goals are covered for a given theme and to plan for areas to be revisited and developed.

In addition, an activity may be carried out to develop a range of different Early Learning Goals. For example, when the children make salt dough loaves for the delivery van, this will involve reading recipes, and filling in forms so the driver know which loaves and how many to deliver to which shop. They will be developing their reading and writing skills for literacy as well as



fine motor skills which are part of physical development. Thus, whilst adult-focused activities may have clearly defined goals at the planning stage, it must be remembered that as children take on ideas and initiate their own learning and activities, goals may change.

## The Prime Areas of Learning

### Communication and Language

**Listening and attention:** children listen attentively in a range of situations. They listen to stories, accurately anticipating key events and respond to what they hear with relevant comments, questions or actions. They give their attention to what others say and respond appropriately, while engaged in another activity. (CL1)

**Understanding:** children follow instructions involving several ideas or actions. They answer 'how' and 'why' questions about their experiences and in response to stories or events. (CL2)

**Speaking:** children express themselves effectively, showing awareness of listeners' needs. They use past, present and

## Example chart to aid planning in the EYFS

Week beginning:	Monday	Tuesday	Wednesday	Thursday	Friday
<b>FOCUSED ACTIVITIES</b>					
Focus Activity 1:					
Focus Activity 2:					
Stories and rhymes					
<b>CONTINUOUS PROVISION (Indoor)</b>					
Collage					
Construction (large)					
Construction (small)					
ICT					
Imaginative play					
Listening					
Malleable materials					
Mark making					
Painting					
Role play					
Sand (damp)					
Sand (dry)					
Water					
<b>CONTINUOUS PROVISION (Outdoor)</b>					
Construction					
Creative play					
Exploratory play					
Gross motor					
<b>ENHANCED PROVISION (Indoor)</b>					
<b>ENHANCED PROVISION (Outdoor)</b>					



# Theme 1: Number hunt



## Communication and Language

- With a small group of children, look at two sets of laminated numerals from 1 to whatever number is appropriate for the group. Ensure the two sets are different sizes. Place all the numbers inside the circle, ask the children to choose one each. Ask them to say the number, if it is big or small and why they chose it. Then ask them to listen carefully and give some simple instructions related to the numbers. For example 'if you have a small 2 then clap your hands.' (CL1, 2, 3)
- Quick games for transition times, or when waiting for others – jump 2 times, pat your head 3 times etc. The children can take turns giving the instructions. (CL1, 2, 3)

## Physical Development

Both the following ideas are based outside where there is more space, especially if lots of children are involved.

- Physical number games with a small group or everyone such as: calling out a number and an action '1 stamp', '2 jumps' etc. For more able children, hold up number cards and for older children ask them to make up simple sequences with actions and numbers, they could even record these for others to try. (PD1)
- Find someone with the same number game. Each child is given a card with either a number of objects or a numeral on it, they keep it a secret, when everyone has a card and is happy with their number they move about the space saying their number, when they find someone with the same they stand still together until everyone is in number groups. Each group in turn chooses an action and does that action their number of times, the other groups count and call out the number. For older children the numbers may all be even or odd, do they notice? (PD1)

## Personal, Social and Emotional Development

- Begin with a number hunt, either in the room, immediate vicinity or on a walk around the area. This can be done with small groups, which then means the children can discuss different things they saw and compare numbers. Discuss how to record what they see, maybe adults writing numbers on a clipboard, talking into a dictaphone, children taking photos with a digital camera, children with a list of numbers that they tally mark against. This will set the focus for the six weeks, encouraging children to be more aware of numbers in everyday life. Ensure that the children are aware of the safety rules for walking around the environment before you leave the room, or how they need to think about others if they are hunting inside the room, some

children may be playing a quiet game. (PSE1, 2, 3)

- Make a number trail (see activity opposite). (PSE1, 3)

## Literacy

- Sit outside and share a variety of number-based books such as *Kipper's Book of Numbers* and *One Smiling Sister* (see Resources). Children can make their own book of numbers either individually, with a friend or in a small group, based on that what they found on the hunt or can find in the outside area. (L1)
- Read the non-fiction book *How many Baby Pandas?* (see Resources) This links information with counting and is best shared with a few children at a time so that they can count the pandas as you read. Being in a small group allows them to discuss what is happening on the pages and talk about the problems facing pandas in the wild. (L1)

## Mathematics

- Add number cutters and small beads or candleholders to the dough box resources. Observe the play and when an interest is shown in the number cutters, encourage the children to have a go at making numbers, encourage them to feel around the number shapes with their eyes open and then with their eyes closed – can they guess which number it is? Can they push one bead or candle holder into the number 1? What about number 2, how many beads do you need? (M1)
- Go for a short walk and look at the number plates of vehicles, talk about why vehicles have numbers and how it may be good to have number plates on the vehicles at the setting. The children can then be encouraged to take resources outside to the vehicles and make number plates for each one. Lots of problem solving to be done. (M1)

## Understanding the World

- Make a street (see activity opposite). (UW2, 3)
- Add a basket full of paired socks to the outdoor washing line resources, ensuring that there is a variety of sizes, texture and patterns. Observe the play that evolves from these resources and encourage the children to notice that there are always 2 socks in a pair. Can they find two the same? Can they sort and match pairs for size, patterns, texture and colour, counting how many pairs are red, for example? Discuss who the owners of the socks might be, a giant



or a mouse? Make links with home by asking if anyone has socks like this pair at home? What else do you usually have as a pair? (UW2)

## Expressive Arts and Design

- Make birthday cards for some toys; each toy has a label to show their age. Look at and discuss a range of birthday cards, looking at the numbers on the outside and inside of the cards. Ensure there is a range of resources available for making the cards and for creating the numbers, such as stencils, cards to cut up, numbers to trace around or number stamps. (EAD1, 2)
- Add laminated numbers and blu-tack (or equivalent) to the resources in the construction area (both outdoors and indoors). Encourage the children to use the numbers on their buildings, perhaps to show which garage is for which car, how many blocks high a tower is, how many goats can fit on the bridge etc. (EAD2)

## Activity: Number Trail

**Learning opportunity:** Counting numbers in sequence from 1-10.

**Early Learning Goal:** Mathematics. Children count reliably with numbers from 1-20.

**Resources:** Pictures, numerals, collections of objects, boxes, baskets, pegs and bags.

**Key Vocabulary:** Number names, next, start, finish.

**Organisation:** Small groups.

**What to do:** Discuss and design a number trail with a small group of children who you have observed are interested in numbers or treasure hunts.

They can then lay the trail for other children to discover, the trail could be pictures, numerals or objects from 1-10.

The hunters need to find the numbers in the correct order, maybe as a group or as individuals. You could encourage them to shout or jump or clap the number when they find it.

Ensure that the trail is set at the appropriate level for the children. For older children there could be a box of an object under each number and they can count the right number of each objects into their bag. They can then compare their objects with a friend's objects; do they have the same amount? What happens if they put their collections together?

If the children continue to make number trails in their independent learning time, encourage them to develop their learning by adding timers and recording materials.

## Activity: Make a street

**Learning opportunity:** Recognising and using numbers in order for a purpose while creating a small world scene.

**Early Learning Goal:** Understanding the World. The world.

**Resources:** A variety of boxes, creative tools and materials, toy cars and people, sticky labels and mark making materials, sticky number labels for those who need them, a large board or piece of paper.

**Key Vocabulary:** Next to, beside, in front, behind, odd, even.

**Organisation:** Small groups.

**What to do:** Look at photos taken on the walk and pictures of street scenes. Discuss the house numbers and how they increase by one or two, often the numbers on one side of the street are even numbers and on the other side odd. Put number tiles in the same order.

Read a letter from a group of toy people asking for a new street to live in, encourage the children to choose their resources carefully, talk about garages or parking spaces for the cars next to, in front of the houses or as a group near the houses, how will they know which is their garage?

When the houses have been made and a road drawn large enough for the cars to travel on, how do we know which house to place where? The children can decide how the numbers in the street are going to work, and then position their houses. The street will also need a name.

These streets can then be used in child-initiated play and extended by some challenges – perhaps the postman has a bag of letters to be delivered or the milkman a list of which houses want milk, can the children help?

## Display

Make a grand collage of numbers seen everyday – house numbers, car numbers, cereal packets, birthday cards, phones, recipes, bus numbers, speed signs, clocks.

In front of this on a table, place the toys and birthday cards that the children have made, can the children give each toy the correct card? Add some baked dough birthday cakes and numbered biscuits to extend and continue the interest as the week continues.