

## ROCKET GAME

The children need:-

- a rocket game board each (fig 1).
- Base 10 equipment
- a dice

The children work in pairs or small groups.

They take turns to:

- roll the dice
- collect that number of units
- place them on the fire at the base of the rocket  
(In fig 2, 5 has been rolled).

- When a player has ten or more units, they can be exchanged for a ten-stick (In fig.3, 6 has been rolled, and then ten ones have been exchanged for one ten). The ten-stick can be placed on the rocket to make one of the windows.

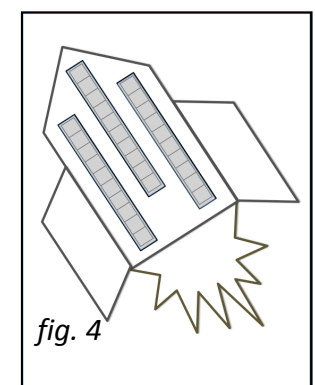
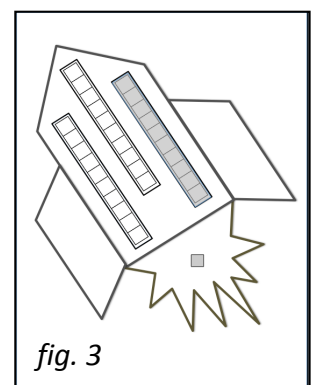
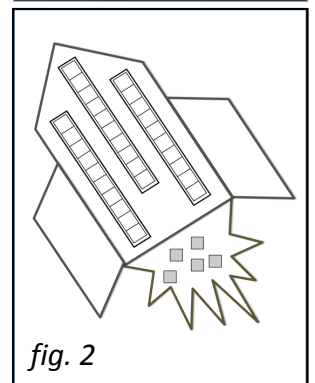
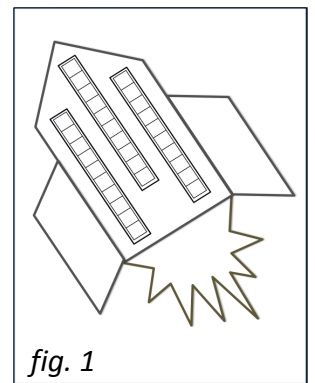
The first player to fill the three the ten-spaces on their rocket, wins the game.

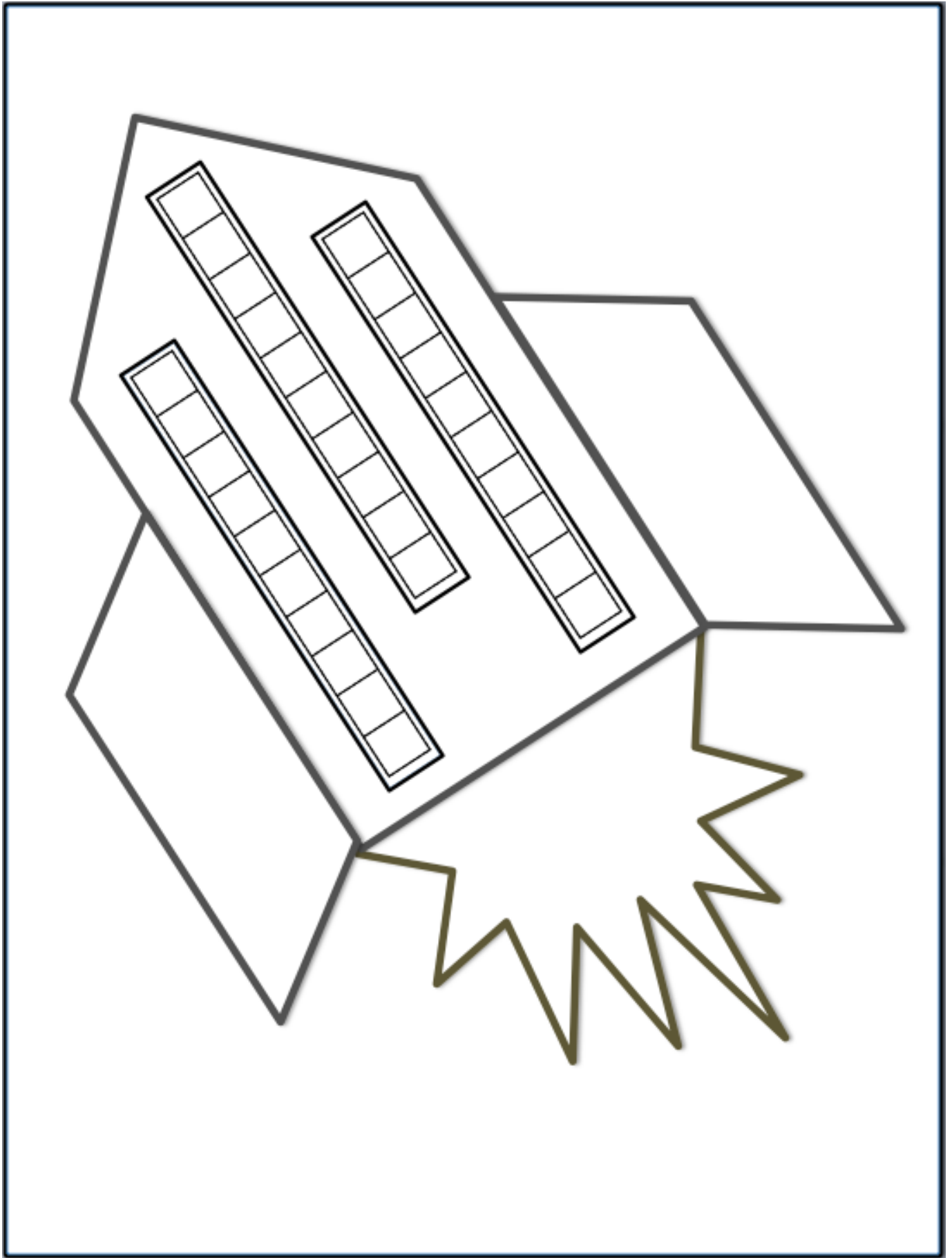
### Next Steps

- After each turn, ask the children to say how much they have. For example, *'I have one ten and one unit, that's 11'*
- Ask the children to play the game in reverse. Begin the game with 3 tens (fig.4), roll the dice and return the number of units.  
(Actually, it is easier to begin with 3 tens and 5 units, because you do not necessarily have to begin by exchanging the ten for ten units!)

### Key ideas for this activity:-

- Developing an understanding of the importance of 10.
- Counting up to ten objects.
- Recognising pennies.



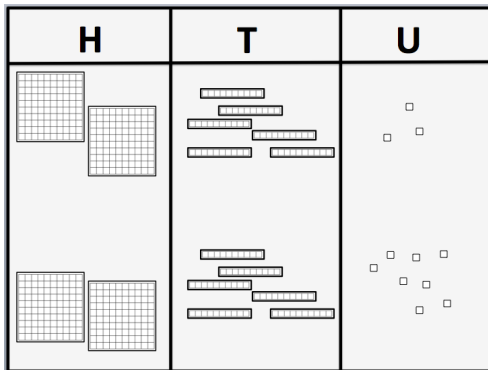


Rocket Game Board

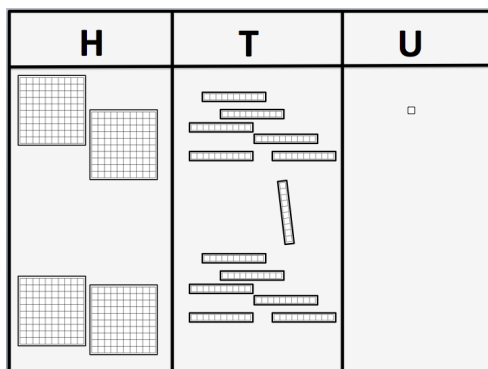
## ADDITION USING BASE 10 MATERIALS AND THE CORRESPONDING LANGUAGE AND RECORDING

*It will help secure the children's understanding if:-*

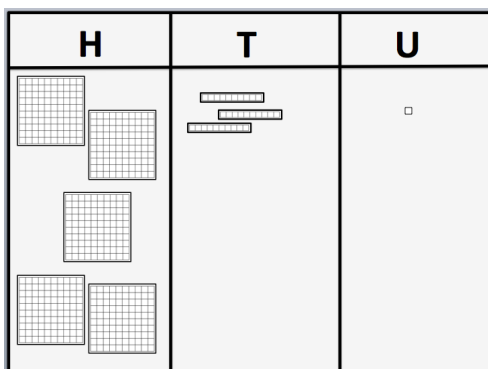
- *all supporting adults use the same language for these calculations.*
- *the same language is used even when the children no longer need/use the Base 10 materials.*
- *teachers clarify the language for some children using other words if necessary.*



For example:  $263 + 268 =$



*"8 plus 3 equals 11 units.  
Exchange ten of the units for  
a ten stick.  
Put the ten in the tens  
column, and the unit stays in  
the units column"*



*"6 tens plus 6 tens equals 12  
tens, plus the extra ten,  
equals 13 tens.  
Exchange ten of the ten-  
sticks for a 100 block  
Put the 100 block in the  
hundreds column, and the  
three tens stay in the tens  
column."*

*"2 hundreds plus 2 hundreds,  
plus the extra hundred makes 5  
hundreds.  
The total is 531"*

$$\begin{array}{r} 263 + \\ 268 \\ \hline \end{array}$$

$$\begin{array}{r} 263 + \\ 268 \\ \hline 1 \\ \hline \end{array}$$

$$\begin{array}{r} 263 + \\ 268 \\ \hline 31 \\ \hline 11 \end{array}$$

$$\begin{array}{r} 263 + \\ 268 \\ \hline 531 \\ \hline 11 \end{array}$$