

# Activity 42



## Grow a Snack



**STUDY QUESTION:**

What kind of farming can you do in a city?

**THE ACTIVITY:**

In this activity the children grow alfalfa sprouts or mushrooms as a basis for exploring the nature of intensive farming.

**SUBJECT AREA:**

Science

**CURRICULUM CONCEPTS:**

GRADE THREE  
SCIENCE

Life cycles (life cycles of animals and plants)

General science skills (observing, predicting, communicating)

**AGRICULTURE CONCEPTS:**

Growth: intensive farming.

**PURPOSE:**

To introduce children to the concepts of growing a crop and of intensive farming.

To give children the opportunity to further develop their language skills as they learn.

**MATERIALS REQUIRED:**

Alfalfa seeds and sprouter (or a kit for growing mushrooms).

Child's data sheet for growing a snack. Supplied in this activity.

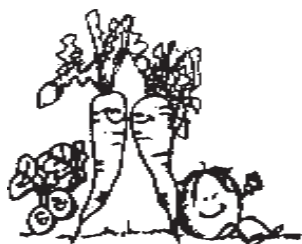
Information sheet on intensive farming. Supplied in this activity.

Snack food (bread or crackers, dip).

Poem "Another Way". Supplied in this activity.

**TIME REQUIRED:**

2 to 3 class periods.



## Procedure

### Introduction

1. Read the poem “Another Way” to introduce the activity. Then discuss the notion of intensive farming by listing examples on the board - greenhouse farming, market gardening, poultry farming, etc. Ask the children to compare the space required by one of these with the space required for grain farming. Emphasize that with the help of specialized equipment these small farms can operate at very high levels of efficiency - one greenhouse for example can supply a number of supermarkets.

### Observing/Recording

2. Have groups of children raise snacks. Have them keep simple records in notebooks or on data sheets such as the one provided.

### Synthesizing/Writing

3. Have the children use their notes to write up “The Story of a Mushroom” or “The Story of an Alfalfa Sprout”.

### Conclusion

4. Share the stories over snacks! Relate the activity to intensive farming, noting that an item as specific as mushrooms can be the basis for a commercial operation. Emphasize the role of technology in allowing for fast and efficient growth of plants and animals under very carefully controlled conditions.

## Discussion Questions

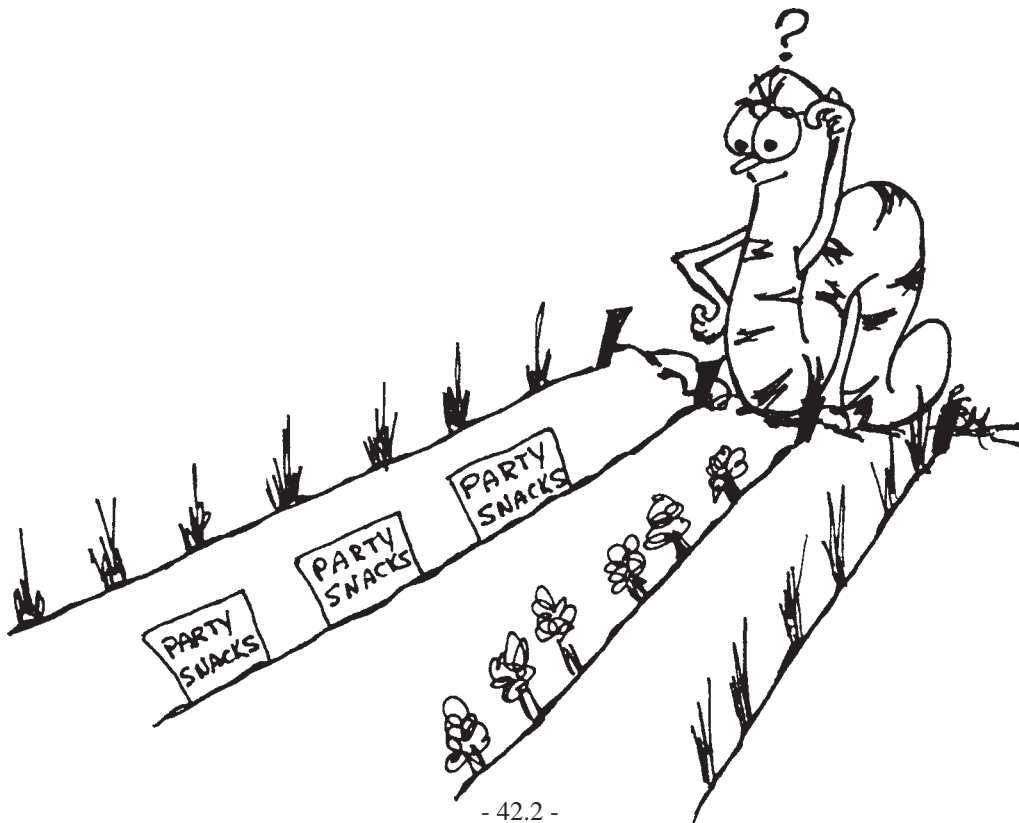
1. What kinds of conditions are needed to grow the plants we used?
2. What kinds of equipment does the farmer use?
3. How did your plants do? Why?
4. What is intensive farming?
5. Does technology really increase efficiency?

## Evaluation Strategies

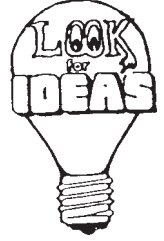
1. Have children draw a picture that depicts their definitions of intensive farming.
2. Use the stories that the children wrote as a method of evaluation.
3. Use the data sheet as a method of evaluation.

## Related Activities

1. Visit a hatchery, a feedlot, or a greenhouse. Have the children use their observations to write cartoons about hatchery chicks, fattened cows, or rosy winter tomatoes. Share the cartoons.



# Another Way



When you look around the countryside you see many types of farming,  
and having to actually count them all would be quite alarming.

You can see some farms that don't take up too much space,  
and also have slowed down the usual hectic pace.

There are some farmers that buy their animal's feed,  
or grow their crops in an enclosed place, so it's easier to weed.

On these farms, special equipment and buildings is what you'll find.  
They help the farmer with his work and take a load off his mind.

These farms usually can produce much more than all the rest,  
though they are more dependent on the market being at its best.

This modern twist to an old game is called **INTENSIVE FARMING**,  
and though it may be fairly new, it actually seems quite charming.

author - *C.G. Bibby*



# Intensive Farming

### DEFINITION

Intensive farming is a term used to refer to a concentrated farming operation. Usually space is relatively small, and specialized equipment and procedures are used to streamline and sometimes speed up production.

The farmer generally relies extensively on suppliers for materials and equipment required in the operation.

The operator may choose to employ intensive farming methods when land is very expensive or at a premium. Thus many intensive operations are located close to urban centers.

### EXAMPLES

Dairying is an example of a type of farming that may be carried on in an intensive manner, though is not always done in this way. In either case, the cash product is milk. However, in an intensive operation, the farmer may not raise the grain and hay to feed his cattle but may buy it from other farmers or suppliers.

Because the confined animals do not have the opportunity to regulate their own feeding as range animals do, herd management is of critical importance to the animals' health and productivity. The farmer relies on specialists such as veterinarians when necessary. He also pays careful attention to the animals' diet; special additives may be required to supplement feed rations, thus providing a balanced diet.

The farmer uses specialized equipment not only in milking but also in regulating the supply of feed to the cows. Mechanization in chores such as cleaning the barn and the milking parlor also increases the farmer's efficiency.

Other examples of intensive farming are market gardening, greenhouse farming, hog raising, feedlots, and broiler and egg production. In fact, most farming operations are adaptable to intensive production to varying degrees; irrigated cropping is an intensive form of crop production.



# Data Sheet: Growing Snacks

Date	Observations

**CONCLUSIONS:**

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