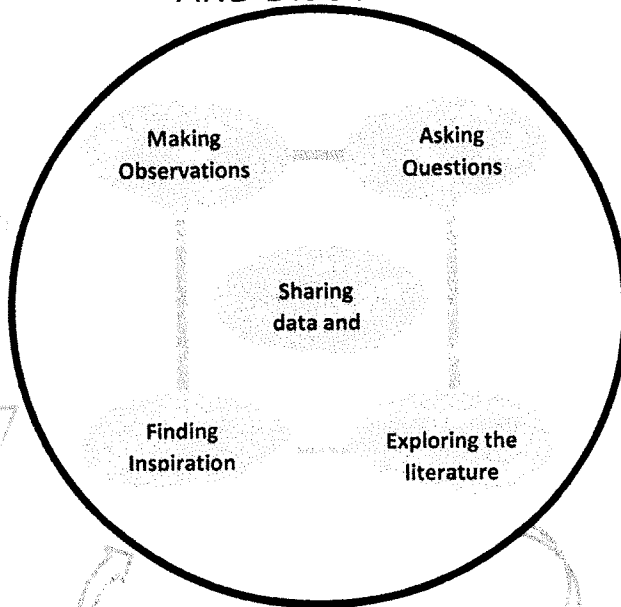


# How Science Works

## EXPLORATION AND DISCOVERY

New technology  
Practical problem  
Curiosity



Personal motivation  
Serendipity  
Surprising observation

## Gathering Data

Hypotheses

Expected results/observations

Actual results/observations

## Interpreting Data

Supportive, contradictory, surprising or inconclusive data may....

...support a hypothesis

...inspire revised assumptions

...oppose a hypothesis

...inspire revised/new hypothesis

Develop technology

Address social issues

Build knowledge

Inform policy

Satisfy curiosity

Solve everyday problems

## BENEFITS AND OUTCOMES

## TESTING IDEAS

Feedback and peer review

Replication

Discussion with colleagues

Publication

Coming up with new questions/ideas

Theory building

## COMMUNITY ANALYSIS AND FEEDBACK