

CONTENTS

INTRODUCTION	1
FOOD SCIENCE PRIMER: WHAT'S FOOD MADE OF?	4
MESS #1: SOFT AND FRESH TO STALE AND OLD: BREAD, PLUS EGG MEN ATTACK!	6
Background	6
Items Needed	6
Procedures	7
The Edible Knowledge	11
MESS #2: CORNSTARCH INTO PUDDING? REALLY!	14
Background	14
Items Needed (For Parts 1, 2, and 3)	14
Procedures	14
Part 1	14
The Edible Knowledge, Part 1	16
Part 2	17
The Edible Knowledge, Part 2	18
Part 3	18
The Edible Knowledge, Part 3	19

MESS #3: FUN WITH COWS AND WHIPPING CREAM!	22
Background	22
Items Needed	22
Procedures	23
Part 1 - Making Real Whipped Cream	23
The Edible Knowledge, Part 1	24
Part 2 - Canned Whipping Cream	25
The Edible Knowledge, Part 2	25
Part 3 - Butter	26
The Edible Knowledge, Part 3	28
MESS #4: EGG-FOAM-TASTIC!	30
Background	30
Items Needed	30
Procedures	30
The Edible Knowledge	33
MESS #5: GREEN EGGS THAT SPIN!	36
Background	36
Items Needed	36
Procedures	36
The Edible Knowledge	37
MESS #6: HUGE MARSHMALLOWS!	40
Background	40
Items Needed	40
Procedures	40
The Edible Knowledge	42
MESS #7: CAKE FOR DINNER! (OK, MAYBE NOT...)	44
Background	44
Items Needed (For Parts 1 and 2)	44
Procedures	45
Part 1: Creamed, No Baking Powder	45
Part 2: Creamed, With Baking Powder	47
The Edible Knowledge	50

MESS #8: GLUEY, GOOEY GLUTEN... IN OUR FOOD?	52
Background	52
Items Needed (For Parts 1 and 2)	53
Procedures	53
Part 1 - Very Little Kneading	53
Part 2 - Lots of Kneading	55
The Edible Knowledge	57
MESS #9: BANG PUFFING!	60
Background	60
Items Needed	60
Procedures	60
The Edible Knowledge	62
MESS #10: FERMENTATION IS EVERYWHERE!	66
Background	66
Items Needed	67
Procedures	67
The Edible Knowledge	68
MESS #11: EATING BROWN APPLES? YUCK!	74
Background	74
Items Needed	74
Procedures	75
The Edible Knowledge	77
MESS #12: WATER IS ACTIVE	80
Background	80
Items Needed	80
Procedures	81
The Edible Knowledge	83
MESS #13: HAVE A COW!	86
Background	86
Items Needed	86
Procedures	86
The Edible Knowledge	89

MESS #14: CREAM THAT’S ICEY AND SMOOTH...AND LUMPY?!	90
Background	90
Items Needed	90
Procedures	90
The Edible Knowledge	94
MESS #15: HEY! PINEAPPLE IS EATING MY JELL-O®?!	96
Background	96
Items Needed	96
Procedures	97
The Edible Knowledge	99
CONCLUSION	101
PICTURE AND ILLUSTRATION ATTRIBUTIONS	102