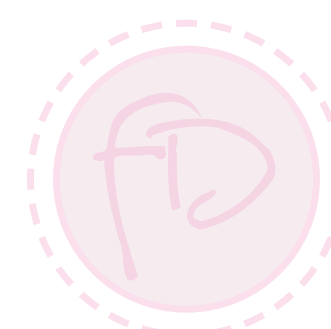
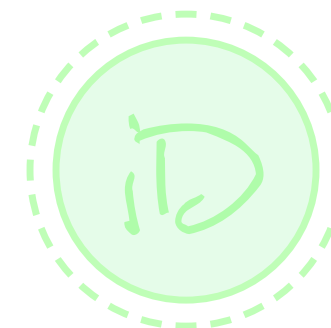
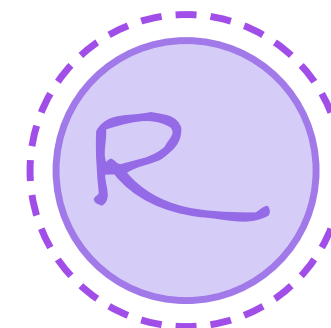


CHILD SAFETY



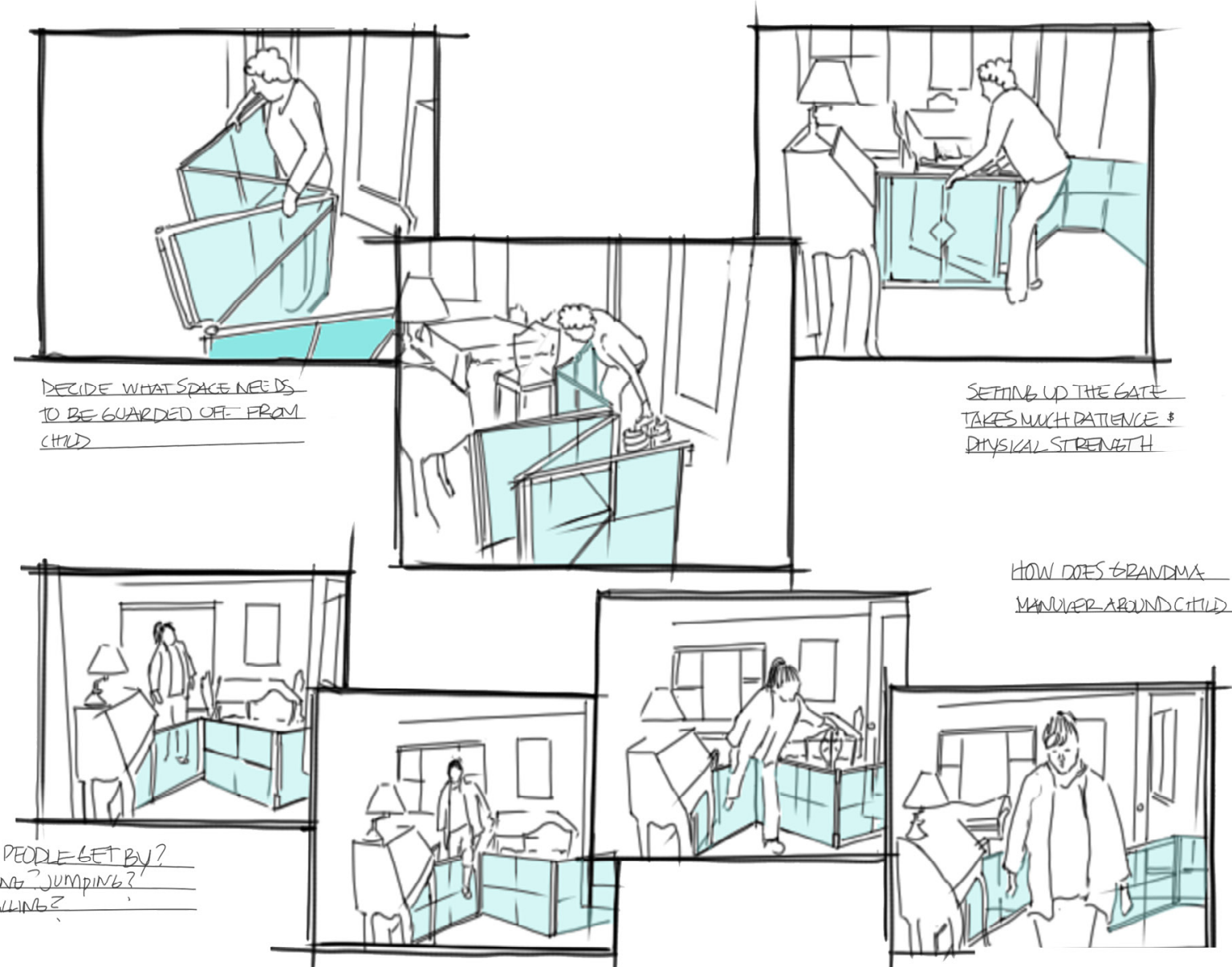
Measurement	Number	Mean	SD	Percentiles												
				1st	5th	10th	50th	90th	95th	99th						
Weight (lb)	130	152.49	23.19	112	119	124	151	184	192	204						
Stature	119	66.28	2.09	61.6	63.3	63.7	66.1	69.3	69.9	70.3						
Sitting height - erect	119	34.77	1.21	32.5	33.0	33.2	34.7	36.5	37.0	37.2						
Sitting height - normal	131	33.42	1.45	29.7	31.0	31.6	33.4	35.2	35.9	36.5						
Trunk height - sitting	131	22.57	1.24	19.8	20.5	20.9	22.7	24.3	24.5	24.9						
Knee height - sitting	132	21.19	0.85	19.4	19.9	20.1	21.2	22.3	22.6	23.4						
Popliteal height - sitting	131	17.31	0.83	15.4	15.7	16.3	17.2	18.4	18.6	19.2						
Span	120	68.50	2.76	63.3	64.2	64.8	68.5	71.5	72.7	75.7						
Span - armbo	121	35.69	1.52	32.4	33.4	33.8	35.7	37.3	37.9	39.4						
Forward arm reach	118	34.21	1.51	31.2	31.7	32.3	34.2	36.1	37.0	38.4						
Shoulder-elbow length	131	14.53	0.66	13.4	13.5	13.7	14.5	15.3	15.6	16.4						
Elbow-middle finger length	130	18.27	0.71	16.9	17.2	17.4	18.3	19.3	19.5	20.4						
Buttock-popliteal length	131	18.57	1.00	16.5	16.9	17.4	18.5	19.8	20.3	21.1						
Buttock-knee length	132	23.26	0.96	21.8	21.8	22.1	23.2	24.6	24.6	24.4						

Measurement	age	M*	SD*	n*	Diagram
Biacromial breadth	weight	132-68 lb	29-74	76	
Bidefoid breadth	A stature with shoes	61-16 in	2-50	77	
Chest breadth	stature without shoes	60-06 in	2-45	78	
Elbow-to-elbow breadth	B eye height, standing	55-54 in	2-66	78	
Bi-acromial breadth	C acromial height, standing	49-48 in	2-14	78	
Hip breadth - sitting	D elbow height, standing	36-73 in	1-89	78	
Knee-to-knee breadth	heel height	1-13 in	0-44	77	
Head breadth					
Face breadth	a elbow height above seat	7-57	1-21	78	
Nose breadth	b vertex height above seat	31-27	1-43	78	
Ear breadth	c eye height above seat	26-82	1-47	78	
Hand breadth	d occiput height above seat	28-09	1-44	78	
Foot breadth	e height of shoulder blades above seat	15-68	1-09	78	
Chest depth	f height to acromion above seat	20-67	1-23	78	
Abdominal depth	g popliteal height from floor	15-15	0-85	78	
Chest circumference	h height to top of knee from floor	18-83	0-87	78	
Chest circumference	i height of top of thighs above seat	4-96	0-90	78	
Chest circumference	j plane	22-04	1-36	78	
Waist circumference	k distance from popliteal angle to sacral plane	18-46	1-14	78	
Upper arm circumference	l distance from heel to sacral plane	36-76	1-78	78	
Carf circumference	m width of thighs	14-74	1-55	78	
Head circumference	n bideltoid width	16-26	1-17	78	
Triceps skinfold (mm)	o horizontal distance from back of thorax to gripped pencil, arm horizontal	28-56	1-67	78	
Subscapular skinfold	p horizontal distance from back of thorax to gripped pencil, arm straight, hand 11 in above seat	25-35	1-84	78	
Grip strength right (lb)					
Grip strength left (lb)					

Chart 3-1 Functional anthropometry of elderly women. From Roberts, "Functional Anthropometry of Elderly Women," Ergonomics 3 (1960), pp. 321-327.

Figure 3-1 Figures illustrating body measurements indicated in Chart 3.2. From Roberts, "Functional Anthropometry of Elderly Women," Ergonomics 3 (1960), pp. 321-327.

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DECIDE WHAT SPACE NEEDS TO BE GUARDED OFF FROM CHILD

SETTING UP THE GATE TAKES MUCH PATIENCE & PHYSICAL STRENGTH

HOW DOES GRANDMA MANUEVER AROUND CHILD GATES?

HOW DO PEOPLE GET BY? HURDLING? JUMPING? UNINSTALLING?